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OF THE STATE OF MONTANA

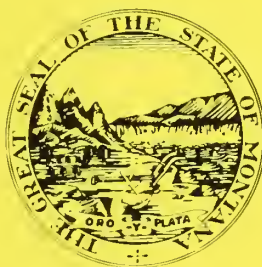
Oil and Gas Conservation Division

Ted Schwinden, Governor

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ANNUAL REVIEW FOR THE YEAR 1981

Relating to

OIL AND GAS

Volume 25

BOARD OF OIL AND GAS CONSERVATION

R. A. CAMPBELL, Chairman
1222 North 27th Street
Billings, Montana 59101

C. J. IVERSON, Vice-Chairman
P.O. Box 830
Shelby, Montana 59474

PAUL C. BUNN
P.O. Box 1111
Havre, Montana 59501

JOHN M. SHEEHY
P.O. Box 296
Big Sandy, Montana 59520

ROBERT PENNER
128 Crescent Drive.
Wolf Point, Montana 59201

BERNT WARD
Plentywood, Montana 59254

H. V. "TED" NEES
5515 Sweetgrass
Billings, Montana 59101

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Board of Oil and Gas Conservation of the State of Montana

Ted Schwinden, Governor

ADMINISTRATORS

CHARLES G. MAIO,
ADMINISTRATOR/PETR. GEOLOGIST
2535 ST. JOHN'S AVENUE
BILLINGS, MONTANA 59102

THOMAS P. RICHMOND
PETROLEUM ENGINEER
2535 ST. JOHN'S AVENUE
BILLINGS, MONTANA 59102

DEE RICKMAN,
EXECUTIVE SECRETARY
P.O. BOX 217
HELENA, MONTANA 59624

DONALD A. GARRITY,
ATTORNEY
1313 11TH AVENUE
HELENA, MONTANA 59601

BOARD MEMBERS

R.A. CAMPBELL, CHAIRMAN
1222 NORTH 27TH STREET
BILLINGS, MONTANA 59101

C. J. IVERSON, VICE-CHAIRMAN
P.O. BOX 830
SHELBY, MONTANA 59474

PAUL C. BUNN
P.O. BOX 1111
HAVRE, MONTANA 59501

JOHN M. SHEEHY
P.O. BOX 296
BIG SANDY, MONTANA 59520

ROBERT PENNER
128 CRESCENT DRIVE
WOLF POINT, MONTANA 59201

BERNT WARD
PLENTYWOOD, MONTANA 59245

H. V. "TED" NEES
5515 SWEETGRASS
BILLINGS, MONTANA 59101

Administrative Office 25 South Ewing, Helena, Montana 59624
Technical Office and Southern District Field Office . . . 2535 St. John's Ave., Billings, Montana 59102
Northern District Field Office 218 Main Street, Shelby, Montana 59474

Annual Review for the Year 1981 Volume 25

ACTIVITY REVIEW — MONTANA 1981

A record number of 1,149 wells were drilled in search of oil and gas in Montana during 1981, an increase of 197 over the last year. A total of 552 wildcats, also a record, and 597 development wells resulted in 402 oil and 218 gas completions. The completed wildcats included 29 oil and 5 gas new field discoveries, three development wells encountered new pay zones and 25 were significant field extensions.

Continued aggressive geological and geophysical exploration programs now being pursued show that the interest in Montana's potential oil and gas reserves is high, and the future outlook for the drilling and development of these reserves remains good.

Oil production was up by more than 1.2 million barrels over last year's total output, 30,813,412 barrels as compared to 29,583,804 barrels for 1980; the first reversal of a steady decline of Montana's yearly oil output since 1973. This is mainly the result of a substantial increase of oil production from the Williston Basin area of Eastern Montana where 19.95 million barrels of oil was produced, exceeding the 1980 oil output from this area by more than 2.2 million barrels. This upturn of oil production also reflects the high success rate of active wildcat and development well drilling in the Williston Basin during 1981, where the number of producing wells has increased from 996 in 1980 to 1,080 in 1981.

Total gas production for 1981 was 50.1 billion cubic feet, 3.7 billion cubic feet less than last year's total gas withdrawals. Marketed associated gas which is included in the yearly total and is produced with the oil from the deeper carbonate pays in the Williston Basin portion of Eastern Montana continues to increase however, and at 5.2 billion cubic feet was up by 463 million cubic feet over 1980's associated gas production.

Exploratory and development drilling can be expected to continue in Northern Montana to test the comparatively shallow gas and oil reservoirs in this area where oil production increased by 88,400 barrels in 1981. Active leasing, expanded exploration programs and drilling demonstrate the continued interest in the major oil and gas reserves expected to underlie Western Montana's Overthrust Belt. Several deep wildcats are drilling and others are reportedly planned.

The Board of Oil & Gas Conservation is designated by 82-11-113 MCA as the Montana jurisdictional agency to administer the Federal Natural Gas Policy Act of 1978 for state and fee lands. For each of the three years, 1979 through 1981, the Act has been in effect, the Board's Administrator and Geologist processed and made determinations on totals of 328, 273 and 273 N.G.P.A. applications. A summary of the 1981 Docket determinations is as follows: 256 qualified, 2 withdrawn, 9 pending additional documents, and 6 deferred until additional monthly production was available. Of the 273 N.G.P.A. (FERC) applications submitted, 96 were for new onshore well (Category 102-2 - 2.5 mile test), 1 new onshore well (Category 102-3 - 1,000' deeper test), 47 new onshore reservoir (Category 102-4), 93 new onshore production well (Category 103), and 36 stripper well (Category 108).

A record 164 orders were issued by the Board during the year, 25 more than in 1980. The greater portion of which included requests for drilling and spacing units, pooling of interests, unitizations, establishing field delineations and field spacing rules, exceptions to spacing rules and the inclusion of shallower and deeper pay zones into field rules; and 19 were administrative orders that regulate the disposal of produced water for the protection of fresh water resources. (CGM-1982)

**1981
SUMMARY OF YEAR ACTIVITIES**

OIL

	Bbls	Bbls of Oil per day
Oil Produced	30,813,411	84,420
Oil Imported:		
From: Canada	11,796,956	
North Dakota	14,455	
Wyoming	18,298,500	
Total	<u>30,109,911</u>	82,493
Oil Exported	21,566,733	59,087

GAS

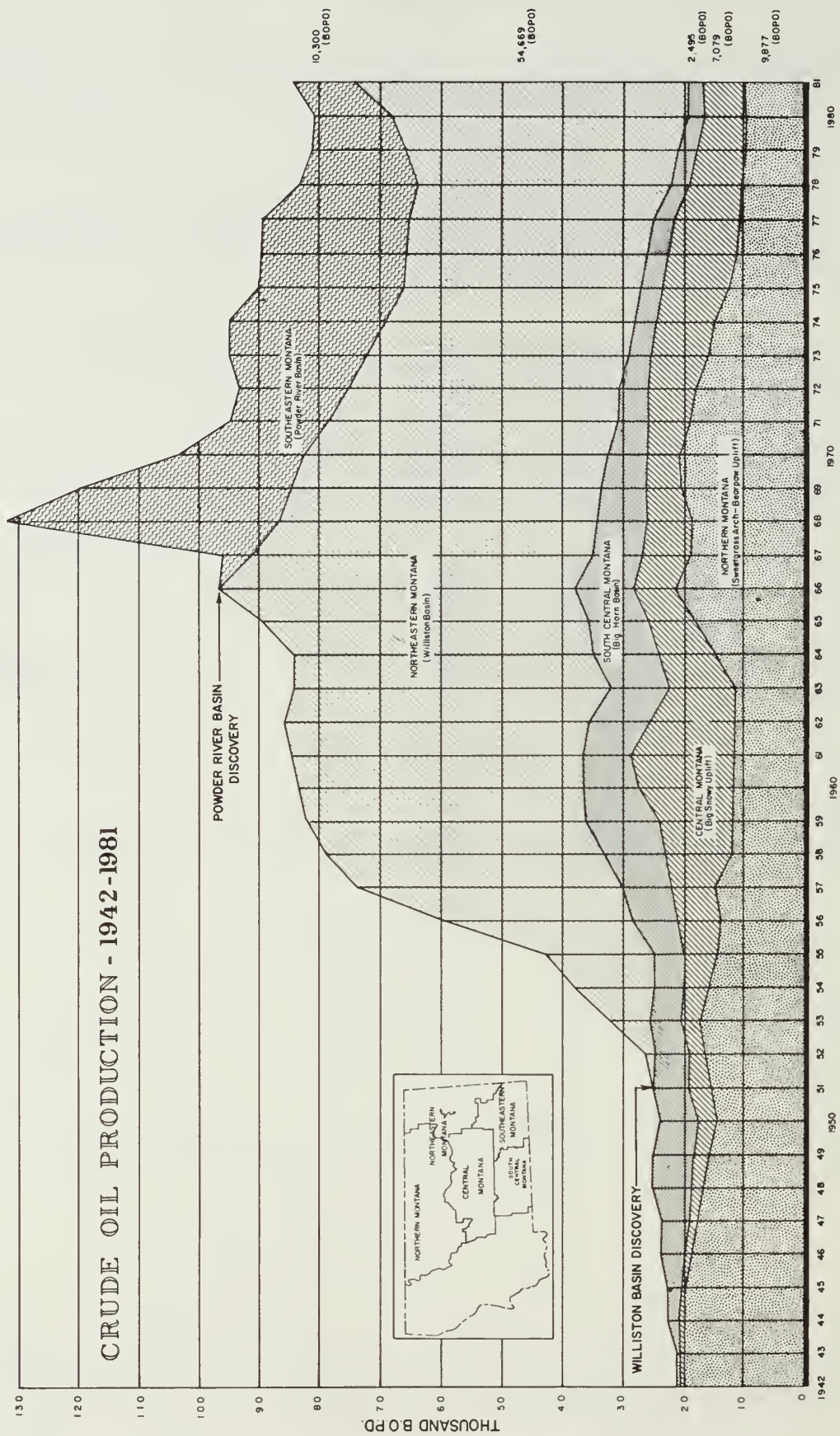
	MCF	MCF per day
Gas Withdrawals:		
Natural	44,837,043	
Associated	<u>5,235,968</u>	
Total	50,073,011	137,186
Gas Imported:		
From: Canada	20,865,000	
North Dakota	6,630,000	
Wyoming	<u>10,340,000</u>	
Total	37,835,000	103,658
Gas Exported:		
To: Canada	106,000	
South Dakota	4,384,000	
Wyoming	2,976,000	
Midwest	<u>11,699,000</u>	
Total	19,165,000	52,507

FIVE YEAR SUMMARY

	1977	1978	1979	1980	1981
PRODUCTION IN BARRELS:					
Northern Montana	4,060,957	3,671,322	3,536,296	3,516,807	3,605,207
South Central	1,210,064	1,095,737	1,131,798	1,055,105	910,595
Central	3,677,361	3,343,556	3,029,397	2,612,091	2,583,690
Williston Basin	14,621,635	15,103,853	16,546,576	17,739,142	19,954,159
Powder River Basin	9,110,037	7,252,869	5,713,032	4,660,659	3,759,760
TOTAL	32,680,054	30,467,337	29,957,099	29,583,804	30,813,411
NUMBER OF PRODUCING WELLS:					
Northern Montana	1,999	2,052	2,089	2,212	2,280
South Central	109	115	112	124	132
Central	343	347	340	358	354
Williston Basin	789	863	886	996	1,080
Powder River Basin	178	169	165	148	174
TOTAL	3,418	3,546	3,592	3,838	4,020
AVERAGE DAILY PRODUCTION/WELL:					
Northern Montana	5.6	4.9	4.6	4.3	4.3
South Central	30.4	26.1	27.7	23.2	18.9
Central	29.4	26.4	24.4	19.9	20.0
Williston Basin	50.8	48.9	51.2	48.7	50.6
Powder River Basin	140.2	117.6	94.9	86.0	59.2
STATE AVG.	26.2	23.5	22.9	21.1	21.0
DEVELOPMENT WELLS DRILLED:					
Oil Wells	98	123	120	241	276
Gas Wells	220	223	235	203	133
Dry Holes	188	232	182	206	188
TOTAL	506	578	537	650	597
EXPLORATORY WELLS DRILLED:					
Oil Wells	24	21	35	30	126
Gas Wells	19	15	20	12	85
Dry Holes	129	179	211	260	341
TOTAL	172	215	266	302	552
TOTAL WELLS DRILLED	678	793	803	952	1,149
TOTAL FOOTAGE DRILLED	2,482,379	2,968,842	3,147,341	4,032,032	5,797,770
AVERAGE FOOTAGE DRILLED	3,661	3,744	3,919	4,235	5,046

SUMMARY OF DRILLING BY COUNTIES — 1981
STATE OF MONTANA

County	Drilling Permits Issued	Wildcats		Dry	Development		Total Wells	Footage Drilled	Average Depth
		Oil	Gas		Oil	Gas			
Beaverhead.....	1			6	6		0	0	0
Big Horn.....	8			17	1		14	52,946	3,782
Blaine.....	68		20			10	90	140,367	1,560
Broadwater.....	0			1			1	7,339	7,339
Carbon.....	29		1	7	3	3	16	103,196	6,450
Carter.....	11		1	1			5	6,133	1,227
Cascade.....	2			2			2	4,504	2,252
Chouteau.....	29	1	5	26			32	67,751	2,117
Custer.....	2			2			2	13,211	6,606
Daniels.....	5			6			7	42,451	6,064
Dawson.....	18	4		6			10	108,009	10,801
Fallon.....	49		2	2	28	7	40	274,684	6,867
Fergus.....	13			10			10	19,074	1,907
Garfield.....	12			7			8	76,780	9,598
Glacier.....	89	1	3	1	5	14	48	168,695	3,514
Golden Valley.....	12	1		7			8	27,293	3,412
Hill.....	46		6	17		14	44	97,553	2,217
Judith Basin.....	2						0	0	0
Liberty.....	43		6	26	4	5	46	103,449	2,249
McCone.....	15			8	2		11	87,031	7,912
Madison.....	1						0	0	0
Meagher.....	1						0	0	0
Musselshell.....	81	7		11	12		42	180,880	4,307
Park.....	2			2			2	20,660	10,330
Petroleum.....	9			6			7	22,522	3,217
Phillips.....	43		6	5		8	20	38,929	1,946
Pondera.....	102	8	7	18	22	7	70	140,816	2,012
Powder River.....	17			2	9		15	67,344	4,490
Powell.....	1						0	0	0
Richland.....	171	51	1	25	54		134	1,534,422	11,451
Roosevelt.....	115	23		21	28		79	799,746	10,123
Rosebud.....	35	3		14	1	5	27	142,986	5,296
Sheridan.....	94	24		19	32		92	860,297	9,351
Stillwater.....	14		1	5	2	6	17	41,753	2,456
Sweetgrass.....	3		1	2			3	20,605	6,868
Teton.....	38		2	13	5	1	24	86,422	3,601
Toole.....	254	2	23	28	62	40	193	321,000	1,663
Treasure.....	2			2			2	12,140	6,070
Valley.....	22			5		10	16	42,117	2,632
Wibaux.....	15	1		4			5	33,204	6,641
Yellowstone.....	12			7			7	31,461	4,494
TOTALS.....	1,486	126	85	341	276	133	1,149	5,797,770	5,046



GAS PRODUCTION DATA — 1981

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Field	County	Producing Formations	1981 Marketed MCF
Natural Gas			
Alma	Liberty	Blackleaf, Bow Island, Sawtooth	4,564
Amanda	Toole	Swift	110,219
Antelope Coulee	Toole	Bow Island	17,361
Arch Apex	Toole	Bow Island	216,824
Badlands	Hill	Eagle	321,944
Battle Creek	Blaine	Eagle	2,085,517
Bears Den	Liberty	Sawtooth, Sunburst	15,964
Bell Creek	Powder River	Muddy	226,304
Big Coulee	Golden Valley, Stillwater	Lakota, Morrison	765,405
Big Rock	Glacier	Blackleaf, Bow Island	358,054
Bills Coulee	Teton	Sunburst, Madison	432,048
Black Butte	Hill	Eagle, Judith River	39,880
Black Coulee	Blaine	Eagle	184,433
Blackfoot	Glacier	Dakota	366,767
Black Jack	Liberty	Sunburst, Swift, Blackleaf	89,842
Bowdoin	Phillips, Valley	Bowdoin, Valley	8,851,781
Bowes	Blaine	Eagle	348,713
Browns Coulee	Hill	Judith River, Eagle	91,912
Browns Coulee, East	Hill	Eagle	119,993
Bullwacker and Area	Blaine, Chouteau	Judith River, Eagle-Virgelle	852,325
Canadian Coulee	Hill, Liberty	Sawtooth	479,597
Cedar Creek	Fallon	Judith River, Eagle	1,065,507
Chain Lakes	Hill	Eagle	31,878
Chester Area	Liberty	Bow Island	2,567
Chinook, East	Blaine	Eagle	34,337
Chip Creek	Chouteau	Eagle-Virgelle	13,018
Clark's Fork, South	Carbon	Frontier	3,956
Coal Creek	Hill	Eagle	61,909
Conrad Butte (Ledger Field)	Pondera, Toole	Bow Island	561,700
Cut Bank and Reagan	Glacier, Toole	Blackleaf, Moulton, Sunburst, Cut Bank, Madison	1,993,816
Dry Creek	Carbon	Judith River, Eagle, Frontier, Greybull, Lakota	875,972
Dunkirk, North	Toole	Bow Island	258,627
Eagle Springs	Toole	Bow Island	180,511
Ethridge	Toole	Bow Island, Swift	479,784
Flat Coulee	Liberty	Bow Island, Dakota, Swift, Sawtooth	61,599
Fred and George	Toole	Sunburst, Swift	106,067
Fresno	Hill	Judith River, Eagle-Virgelle	110,250
Fritzpatrick Lake	Toole	Bow Island	298,894
Gildford, North	Hill	Sawtooth	95,396
Gold Butte	Toole	Bow Island	5,412
Grandview	Liberty	Bow Island, Madison	179,102
Gypsy Basin	Pondera	Sunburst	517,557
Hammond	Carter	Muddy	65,888
Hardin	Big Horn	Frontier	25,701
Haystack	Liberty	Bow Island	89,627
Highview	Pondera	Madison	11,618
Keith Block	Liberty	Blackleaf, Bow Island, Sawtooth	643,645
Kevin-Sunburst	Toole	Bow Island, Sunburst, Swift, Sun River, Nisku	489,959
Kevin, Southwest	Toole	Bow Island, Sunburst, Swift	359,786
Kicking Horse	Toole	Bow Island, Sunburst, Sawtooth	208,593
Kinyon Coulee and Area	Toole	Bow Island	41,105
Lake Basin	Stillwater	Claggett, Eagle-Virgelle, Telegraph Creek, Frontier	453,610
Laredo	Hill	Eagle	19,751
Leroy	Blaine	Judith River, Eagle-Virgelle	718,688
Liscom Creek	Custer	Shannon	61,461
Little Rock	Glacier	Bow Island	274,621
Lohman	Blaine	Eagle	212,735
Marias River	Toole	Bow Island	172,254
Middle Butte	Toole	Bow Island	91,320
Middle Dry Creek	Carbon	Frontier, Lakota	28,824
Miners Coulee	Toole	Bow Island, Sunburst-Swift	688,089
Mt. Lily	Liberty	Madison	62,528
O'Briens Coulee	Liberty	Bow Island	285,824
Phantom	Toole	Sunburst, Swift	699,776
Plevna	Fallon	Judith River	14,991
Police Coulee	Toole	Bow Island	91,598
Prairie Dell	Toole	Bow Island, Swift	727,826
Pumpkin Creek	Custer	Shannon	7,925
Rapelje	Stillwater	Judith River, Claggett, Eagle-Virgelle	106,410
Rattlesnake Coulee	Toole	Bow Island	122,827
Red Rock	Hill	Eagle	150,477
Rocky Boy Area	Hill	Eagle	71,617
Rudyard	Hill	Sawtooth	542,065
Sage Creek	Liberty	Blackleaf	301,169
Sawtooth Mountain and Area	Blaine	Judith River, Eagle	698,647
Sherard	Blaine, Chouteau	Judith River, Eagle	623,693
Snoose Coulee	Liberty	Bow Island	65,434
Soberup Coulee	Pondera	Bow Island	2,917
South Devon	Toole	Bow Island	73,842
Strawberry Creek Area	Toole	Bow Island	19,294
Swanson Creek	Phillips	Phillips	324,456
Three Mile	Blaine	Eagle	12,215
Tiber	Toole	Bow Island	48,517
Tiger Ridge	Blaine, Hill	Judith River, Eagle	10,488,982
Trail Creek	Liberty, Toole	Bow Island, Sunburst	113,060
Two Forks	Blaine	Eagle	-0-
Utopia	Liberty	Sawtooth	165,277
Vandelia	Valley	Eagle, Bowdoin	153,691
West Butte	Toole	Bow Island, Sawtooth, Madison	22,230
Whitlash	Liberty	Bow Island, Kootenai, Swift	611,734
Williams	Pondera	Bow Island	381,267
Willow Ridge	Toole	Bow Island	272,173
SUB TOTAL NATURAL GAS			44,837,043

ASSOCIATED MARKETED GAS — 1981

Field	County	Producing Formation	1981 Marketed MCF
Associated Gas			
Anvil	Roosevelt	Red River	161,795
Bainville, North	Roosevelt	Red River, Winnipegosis	19,970
Bainville, West	Roosevelt	Red River	12,284
Big Muddy Creek	Roosevelt	Interlake, Red River	46,258
Blue Hill	Richland	Red River	14,098
Brorson & South Brorson	Richland	Madison, Red River	38,323
Burget, East	Roosevelt	Ratcliffe, Red River	430
Cabin Creek	Fallon	Mission Canyon, Interlake, Red River	392,656
Canal	Richland	Red River	17,513
Clark's Fork, South	Carbon	Greybull	14,647
Clear Lake	Sheridan	Mission Canyon, Red River	74,476
Colored Canyon	Sheridan	Red River	71,898
Comertown	Sheridan	Red River	18,740
Crane	Richland	Red River	167,853
Dagmar	Sheridan	Red River	23,017
Diamond Point	Roosevelt	Red River	58,419
Divide	Sheridan	Mission Canyon	2,896
Dry Creek	Carbon	Virgelle	138,551
Dry Creek, West	Carbon	Greybull	12,586
Dwyer	Sheridan	Ratcliffe	2,437
Eagle	Richland	Mission Canyon	12,840
Elk Basin	Carbon	Tensleep	57,008
Fairview	Richland	Winnipegosis, Red River	388,648
Fishhook	Sheridan	Red River	9,812
Fort Gilbert	Richland	Red River, Madison	4,892
Four Mile Creek	Richland	Red River	20,263
Four Mile Creek, West	Richland	Red River	13,908
Gypsy Basin	Pondera	Sunburst, Madison	214,723
Hay Creek	Richland	Mission Canyon, Red River	7,246
Highview	Pondera	Madison	19,594
Honker	Sheridan	Madison	325
Katy Lake, North	Sheridan	Red River	205,988
Lambert	Richland	Red River	7,821
Lone Butte	Richland	Red River	16,312
Lonetree Creek	Richland	Red River	88,037
Lookout Butte (Coral Creek)	Fallon	Interlake, Red River	90,561
Lowell	Sheridan	Red River	2,884
Medicine Lake	Sheridan	Red River, Winnipegosis	145,235
Midby	Sheridan	Red River	428
Miners Coulee	Toole	Sunburst	207
Mon Dak West	Richland	Madison, Mission Canyon, Ordovician	589,655
Mustang	Richland	Red River	53,631
North Fork	Richland	Madison, Red River	6,490
Ollie	Fallon	Duperow, Red River	317
Otis Creek	Richland	Red River	39,771
Oxbow	Roosevelt	Red River	9,128
Pelican	Sheridan	Red River	13,119
Pennel	Fallon	Madison, Silurian, Ordovician	373,129
Pine	Dawson, Prairie, Fallon, and Wibaux	Interlake, Mission Canyon, Red River	74,193
Putnam	Richland	Interlake, Mission Canyon, Red River	298,633
Raymond	Sheridan	Mississippian, Nisku, Red River, Winnipegosis	9,649
Reagan	Glacier	Madison	2,022
Red Bank	Roosevelt	Madison, Red River	25,738
Red Fox	Roosevelt	Nisku	385
Refuge	Sheridan	Red River	15,083
Ridgelawn	Richland	Madison, Red River	135,310
Rocky Point	Roosevelt	Red River	16
Second Creek	Richland	Red River	98,284
Sidney	Richland	Mission Canyon	39,597
Sidney, East	Richland	Madison	41,013
Single Tree	Roosevelt	Red River	4,267
Sioux Pass	Richland	Mission Canyon, Silurian, Ordovician	111,497
Sioux Pass, East	Richland	Red River	3,208
Sioux Pass, Middle	Richland	Red River	83,732
Sioux Pass, North	Richland	Red River	198,979
South Fork	Richland	Red River	49,673
Three Buttes	Richland	Mission Canyon, Gunton, Red River	5,903
Tule Creek	Roosevelt	Nisku	722
Two Medicine Creek	Glacier	Mission Canyon	19,332
Vaux	Richland	Mission Canyon, Red River	153,448
West Butte	Toole	Sunburst	34,449
Whitlash	Liberty	Swift	121,268
Wrangler	Sheridan	Red River	14,329
Wrangler, North	Sheridan	Red River	3,918
Wright Creek	Powder River	Muddy	1,712
Wildcat	Roosevelt		1,207
Wildcat	Sheridan		7,582
SUB TOTAL ASSOCIATED GAS MARKETED			5,235,968
SUB TOTAL NATURAL GAS MARKETED			44,837,043
TOTAL GAS MARKETED - 1981			50,073,011

NATURAL GAS IMPORTED MMCF

Canada	20,865
Wyoming	10,340
Dakotas	6,630
	<u>37,835 MMCF</u>

NATURAL GAS EXPORTED MMCF

Canada	106
Wyoming	2,976
Dakotas	4,384
Midwest	11,699
	<u>19,165 MMCF</u>

BARRELS OF CRUDE OIL REFINED IN MONTANA — 1981

	CONTINENTAL OIL CO.	EXXON COMPANY	FARMERS UNION	KENCO REF. INC.	PHILLIPS PET. CO.	WESCO REF. CO.	FLYING "J"	TOTALS
Total Montana Oil	2,860,142	516,082	702,237	1,367,664	1,763,741	880,775	600,794	8,691,435
Canada Oil Imported	7,025,514	2,182,018	2,429,892	---	159,532	---	---	11,796,956
North Dakota Oil Imported	14,455	---	---	---	---	---	---	14,455
Wyoming Oil Imported	3,183,072	10,260,397	4,855,031	---	---	---	---	18,298,500
Total Montana, Canadian, North Dakota, & Wyoming Oil	13,083,183	12,958,497	7,987,160	1,367,664	1,923,273	880,775	600,794	38,801,346

PERCENTAGE OF CRUDE OIL REFINED

	Montana	Canada	North Dakota	Wyoming
Year: 1977	18.49%	43.32%	.41%	37.78%
Year: 1978	18.51%	44.71%	.14%	36.64%
Year: 1979	17.12%	46.58%	.01%	36.29%
Year: 1980	17.92%	39.42%	.06%	42.60%
Year: 1981	22.40%	30.40%	.04%	47.16%

AVERAGE BARRELS PER DAY

	Montana	Canada	North Dakota	Wyoming	Total
Year: 1977	24,461	57,317	549	49,994	132,321
Year: 1978	24,240	58,545	190	47,982	130,957
Year: 1979	23,747	64,598	17	50,322	138,684
Year: 1980	21,901	48,162	69	52,050	122,182
Year: 1981	23,812	32,320	40	50,133	106,305

REFINING FIVE YEAR COMPARISON

1977	1978	1979	1980	1981
48,297,000	47,738,947	50,619,676	44,718,698	38,801,346

BOARD OF OIL AND GAS CONSERVATION OF THE STATE OF MONTANA

STATEMENT OF CRUDE OIL PRODUCTION AND VALUATION—ALL MONTANA FIELDS YEAR 1981 AND ACCUMULATED TOTALS FROM DISCOVERY DATE

FIELD	COUNTY	PRODUCTION YEAR 1981			CUMULATIVE TO DECEMBER 31, 1981	
		BARRELS	VALUE	AVERAGE PRICE	BARRELS	VALUE
Alkali Coulee	Sheridan	8,070	291,456	36.116	8,070	291,456
Andes	Richland	5,266	190,292	36.136	16,273	490,623
Anvil	Roosevelt	322,899	11,597,240	35.916	709,528	18,890,250
Anvil, North	Sheridan	5,636	204,621	36.306	6,446	233,781
Ash Creek	Big Horn	7,543	263,402	34.920	790,834	2,484,259
Bainville, North	Roosevelt	144,548	5,200,259	35.976	317,618	11,560,578
Bainville, West	Roosevelt	28,548	1,026,643	35.962	90,406	2,790,134
Bannatyne	Teton	14,085	473,876	33.644	267,038	1,634,918
Bear's Den	Liberty	8,326	281,261	33.781	464,674	2,372,488
Belfry	Carbon	3,013	105,458	35.001	94,817	339,060
Bell Creek	Powder River	3,718,309	132,810,561	35.718	116,577,772	841,230,964
Benrud	Roosevelt	1,891	68,248	36.091	218,560	740,510
Benrud, East	Roosevelt	52,670	1,805,686	34.283	2,452,400	11,249,353
Benrud, Northeast	Roosevelt	9,531	344,546	36.150	917,558	3,120,769
Berthelote	Toole	702	19,215	27.372	54,319	236,869
Big Gully	Musselshell	3,074	97,793	31.813	85,649	1,123,992
Big Gully, North	Musselshell	3,045	109,940	36.105	15,800	305,426
Big Muddy Creek	Roosevelt	59,388	2,103,523	35.420	963,577	13,887,804
Big Wall	Musselshell	83,716	2,933,492	35.041	7,092,625	24,989,649
Big Wall, North	Musselshell	270	9,450	35.000	7,218	116,302
Blackfoot	Glacier	28,473	972,438	34.153	1,169,565	5,492,929
Blue Hill	Richland	9,727	327,187	33.637	121,822	1,977,397
Border	Toole	8,794	301,537	34.289	1,337,777	3,396,212
Boulder	Richland	6,143	219,889	35.795	128,680	1,755,101
Bowes	Blaine	120,038	3,376,549	28.129	8,720,284	26,371,859
Box Canyon	Richland	40,459	1,481,528	36.618	83,682	3,117,950
Bradley	Glacier	6,184	206,552	33.401	227,240	1,079,968
Brady	Pondera	23,813	803,451	33.740	88,950	1,226,235
Bredette	Roosevelt	34,970	1,255,038	35.889	220,146	1,667,542
Breed Creek	Rosebud	83,469	2,808,481	33.647	542,167	9,315,714
Brorson-Madison	Richland	35,354	1,250,506	35.371	528,704	4,223,773
Brorson-Red River	Richland	24,273	860,745	35.461	1,924,139	8,202,274
Brorson, South	Richland	57,660	1,988,809	34.492	1,275,416	9,183,891
Brush Lake	Sheridan	80,854	2,796,416	34.586	1,970,762	11,128,006
Burget	Roosevelt	4,575	164,714	36.003	4,575	164,714
Burget, East	Roosevelt	7,783	277,199	35.616	8,983	320,879
Burns Creek	Dawson, Richland	8,025	273,059	34.026	191,264	1,528,756
Cabin Creek	Fallon	1,567,944	52,891,574	33.732	79,354,563	300,082,509
Canal	Richland	48,972	1,718,379	35.089	548,830	3,778,074
Cannonball	Fallon	28,386	1,028,113	36.219	28,386	1,028,113
Carlyle	Wibaux	34,788	1,252,646	36.008	148,918	3,000,842
Cat Creek	Petroleum, Garfield	83,466	2,999,184	35.933	23,030,124	57,895,182
Charlie Creek	Richland	53,854	1,930,397	35.845	478,559	7,529,181
Charlie Creek, East	Richland	56,676	2,037,672	35.953	100,796	3,742,601
Clark's Fork	Carbon	733	26,900	34.799	84,141	285,435
Clark's Fork, North	Carbon	634	22,887	34.995	1,024,399	2,888,720
Clark's Fork, South	Carbon	279	10,115	36.253	80,509	632,613
Clear Lake	Sheridan	242,235	8,631,318	35.632	951,488	21,798,767
Coal Ridge	Sheridan	1,942	72,279	37.219	18,018	698,829
Colored Canyon	Sheridan	126,683	4,569,329	36.069	339,798	8,541,790
Comertown	Sheridan	206,350	7,391,044	35.818	293,761	10,687,400
Conrad, South	Pondera	2,289	77,169	33.713	137,243	699,384
Cow Creek	McCone	3,923	139,353	35.522	114,043	944,039
Cow Creek, East	McCone	89,781	3,160,740	35.205	1,990,422	18,419,591
Crane	Richland	312,999	11,163,7357	35.667	344,502	12,067,400
Culbertson	Roosevelt	1,088	38,734	35.601	169,051	931,888
Cupton	Fallon	115,371	4,100,978	35.546	1,573,043	14,017,550
Cut Bank	Glacier, Toole	1,309,368	44,449,115	33.947	153,784,729	530,789,479
Dagmar	Sheridan	53,007	1,876,925	35.409	267,707	4,975,128
Dagmar, North	Sheridan	15,362	559,699	36.434	15,362	559,699
Deadman's Coulee	Roosevelt	54,706	1,974,011	36.084	54,706	1,974,011

FIELD	COUNTY	PRODUCTION YEAR 1981			CUMULATIVE TO DECEMBER 31, 1981	
		BARRELS	VALUE	AVERAGE	BARRELS	VALUE
				PRICE		
Dean Dome	Stillwater	12,354	287,268	23.253	39,073	622,254
Deer Creek	Dawson	4,524	156,906	34.683	2,280,117	5,909,544
Delphia	Musselshell	1,449	51,905	35.821	304,543	1,031,987
Devil's Basin	Musselshell	23,910	819,204	34.262	87,372	1,131,331
Diamond Point	Roosevelt	69,298	2,219,871	33.996	237,904	4,497,739
Divide	Sheridan	231,549	8,229,020	35.539	319,358	11,440,998
Dry Creek	Carbon	7,170	257,618	35.930	4,083,910	8,421,181
Dry Creek, West	Carbon	154	5,873	38.135	5,042	148,829
Dugout Creek	Richland	31,283	1,115,677	35.664	31,283	1,115,677
Dwyer	Sheridan	126,997	4,177,947	32.898	6,244,879	23,492,431
Eagle	Richland	140,543	5,002,628	35.595	507,459	11,930,762
Elk Basin	Carbon	757,467	23,926,110	31.587	77,289,253	244,306,272
Elk Basin, Northwest	Carbon	9,582	318,170	33.205	1,198,527	4,791,794
Enid, North	Richland	16,442	577,180	35.104	49,341	1,173,841
Epworth	Richland	35,402	1,273,622	35.976	35,402	1,273,622
Fairview	Richland	272,784	9,414,594	34.513	6,347,496	35,048,945
Fairview, West	Richland	14,933	540,530	36.197	15,975	581,689
Fertile Prairie	Fallon	22,235	760,192	34.189	469,552	2,101,549
Fiddler Creek	Stillwater	212	7,847	37.013	365	11,978
Fishhook	Sheridan	84,113	3,007,208	35.752	128,943	4,754,143
Flat Coulee	Liberty	161,868	5,656,315	34.944	3,561,552	23,984,843
Flat Coulee, East	Liberty	227	8,123	35.782	886	30,520
Flat Lake	Sheridan	494,632	16,802,154	33.969	12,398,674	66,992,284
Flat Lake, South	Sheridan	70,610	2,497,829	35.375	881,493	6,518,069
Fort Gilbert	Richland	124,232	4,464,277	35.935	1,264,588	9,734,569
Four Mile Creek	Richland	27,806	994,982	35.783	243,542	3,802,777
Four Mile Creek, West	Richland	37,099	1,315,234	35.452	138,505	2,851,645
Fox Creek	Richland	19,201	681,693	35.503	113,211	2,102,047
Fox Creek, North	Richland	7,756	278,541	35.913	32,684	777,506
Frannie	Carbon	3,002	91,408	30.449	724,871	1,947,262
Fred & George Creek	Toole	282,336	9,308,900	32.971	12,041,587	58,743,776
Frog Coulee	Richland	15,685	582,196	37.118	93,977	3,031,943
Froid, South	Roosevelt	6,433	231,614	36.004	176,115	1,186,297
Gage	Musselshell	24,174	861,078	35.620	588,495	1,990,653
Gas City	Dawson	136,847	4,830,425	35.298	9,170,274	34,947,022
Girard	Richland	170	5,610	33.000	210,088	781,124
Glacier, East	Glacier	11,084	383,340	34.585	11,236	388,812
Glendive	Dawson	169,455	5,815,696	34.320	11,456,271	38,917,478
Golden Dome	Carbon	1,214	40,685	33.513	41,951	191,526
Goose Lake	Sheridan	225,067	7,819,278	34.742	7,484,254	36,117,561
Goose Lake, East	Sheridan	3,312	123,524	37.296	4,522	168,087
Gossett	Richland	2,649	95,626	36.099	6,900	250,577
Grabon Coulee	Glacier	78,689	2,433,064	30.920	1,440,842	11,192,914
Grandview, East	Liberty	3,543	115,555	32.615	16,730	431,337
Green Coulee	Sheridan	14,202	503,120	35.426	14,202	503,120
Gumbo Ridge	Rosebud	45,259	1,573,384	34.764	395,034	6,077,394
Gunsight	Roosevelt	1,551	56,180	36.222	2,325	85,484
Gypsy Basin	Pondera	44,716	1,508,673	33.739	310,752	3,749,516
Hard Pan	Ponders	212	7,420	35.000	212	7,420
Hardscrabble Creek	Richland	6,296	221,172	35.129	7,538	224,799
Hawk Creek	Musselshell	1,167	40,120	34.379	7,744	53,059
Hawk Haven	Richland	2,764	96,574	34.940	2,764	96,574
Hay Creek	Richland	25,211	887,452	35.201	1,042,042	5,249,966
Hiawatha	Musselshell	30,953	1,017,704	32.879	1,379,847	5,916,063
Hibbard	Rosebud	5,509	190,523	34.584	180,533	903,527
High Five	Rosebud	165,602	5,834,821	35.234	1,243,815	23,456,695
Highview	Pondera	5,368	161,756	30.135	13,811	369,104
Honker	Sheridan	18,419	664,115	36.056	26,283	950,207
Horse Creek	Liberty	991	30,515	30.792	6,565	112,460
Howard Coulee	Musselshell	3,935	137,926	35.051	103,239	1,289,128
Injun Creek	Rosebud	7,696	271,492	35.277	30,734	330,553
Ivanhoe	Musselshell	14,917	531,165	35.608	4,437,292	12,681,232
Jim Coulee	Musselshell	126,502	4,140,537	32.731	3,586,765	28,464,743
Katy Lake, North	Sheridan	451,529	16,241,950	35.971	922,813	33,350,085
Keg Coulee	Musselshell	55,162	1,917,762	34.766	4,927,458	20,672,660
Keg Coulee, North	Musselshell	16,841	590,563	35.067	373,964	3,090,397
Kelley	Musselshell	16,150	556,287	34.445	896,242	3,719,455

PRODUCTION YEAR 1981					CUMULATIVE TO DECEMBER 31, 1981	
FIELD	COUNTY	BARRELS	VALUE	AVERAGE PRICE	BARRELS	VALUE
Kevin Sunburst	Toole	501,542	17,110,607	34.116	73,785,579	176,092,355
Kicking Horse	Toole	302	10,379	34.368	921	32,162
Kincheloe Ranch, West	Rosebud	89,761	3,222,151	35.897	166,931	5,541,096
Krug Creek	Dawson	10,223	373,109	36.497	10,907	398,674
Laird Creek	Liberty	11,839	403,461	34.079	523,147	3,388,778
Lakeside	Roosevelt	487	18,489	37.965	487	18,489
Lambert	Richland	48,974	1,737,451	35.477	58,926	2,108,889
Landslide Butte	Glacier	3,592	118,511	32.993	44,014	347,351
Laurel	Yellowstone	192	6,720	35.000	1,017	36,458
Leary	Powder River	32,463	1,127,894	34.744	415,798	3,987,781
Little Beaver	Fallon	399,530	13,386,253	33.505	9,648,985	47,755,667
Little Beaver, East	Fallon	104,943	3,597,026	34.276	4,664,130	19,085,982
Little Phantom	Toole	6,161	201,847	32.762	29,276	541,983
Little Wall Creek	Musselshell	217,657	7,579,687	34.824	2,158,637	31,588,427
Lodge Grass	Big Horn	6,317	211,563	33.491	259,034	920,097
Lone Butte	Richland	23,258	844,056	36.291	323,476	4,580,051
Lonetree Creek	Richland	133,758	4,776,097	35.707	2,580,295	21,442,411
Long Creek	Roosevelt	5,172	182,628	35.311	39,205	665,843
Long Creek, West	Roosevelt	53,856	1,930,307	35.842	269,145	5,148,386
Lookout Butte	Fallon	542,573	18,267,890	33.669	19,980,423	86,385,816
Lowell	Sheridan	47,468	1,678,753	35.366	66,509	2,397,075
MacKay Dome	Stillwater	18,889	460,476	24.378	29,610	602,079
Mason Lake	Musselshell	82,767	2,977,543	35.975	587,092	13,294,373
Mason Lake, North	Musselshell	1,882	67,323	35.772	11,929	268,401
McCabe	Roosevelt	37,516	1,359,505	36.238	89,743	2,181,642
McCabe, East	Roosevelt	2,571	91,288	35.507	2,571	91,288
Meander	Pondera	904	29,727	32.884	904	29,727
Medicine Lake	Sheridan	389,372	14,191,831	36.448	1,178,432	40,866,573
Melstone	Musselshell	220,797	7,693,892	34.846	2,469,659	20,036,416
Midby	Sheridan	16,157	595,078	36.831	16,157	595,078
Mineral Bench	Roosevelt	3,510	128,157	36.512	161,727	869,341
Miner's Coulee	Toole	3,483	117,872	33.842	144,041	894,879
Mon-Dak West	Richland	982,173	35,100,899	35.738	4,084,764	92,376,494
Monarch	Fallon	149,014	5,187,177	34.810	4,484,775	21,937,592
Mosser Dome	Yellowstone	7,570	259,840	34.325	299,602	1,365,993
Musselshell	Rosebud	2,351	82,558	35.116	17,289	114,737
Mustang	Richland	79,514	2,892,481	36.377	189,449	6,643,540
Nohly	Richland	55,301	1,947,369	35.214	1,010,990	9,936,727
North Fork	Richland	45,512	1,619,636	35.587	227,102	4,121,878
Ollie	Fallon	91,346	3,375,509	36.953	103,240	3,821,249
Otis Creek	Richland	54,088	1,928,670	35.658	642,647	6,455,031
Otter Creek	Sheridan	10,399	375,092	36.070	13,458	491,398
Outlook	Sheridan	143,749	5,102,802	35.498	7,576,987	35,305,104
Outlook, South	Sheridan	6,467	223,441	34.551	664,692	2,142,067
Outlook, West	Sheridan	15,229	539,137	35.402	573,935	2,654,542
Oxbow	Roosevelt	27,358	986,064	36.043	148,803	2,884,734
Palomino	Roosevelt	153,132	5,511,833	35.994	190,880	6,843,980
Pelican	Sheridan	21,491	786,420	36.593	67,229	2,346,661
Pennel	Fallon	3,022,019	102,606,611	33.953	49,738,185	362,007,305
Pete Creek	Toole	1,708	58,318	34.144	9,793	189,147
Phantom	Toole	2,429	82,307	33.885	37,724	586,342
Pine	Dawson, Fallon, Prairie, Wibaux	1,848,080	62,304,321	33.713	93,712,964	356,580,516
Pondera	Pondera, Teton	343,919	11,585,255	33.686	22,080,115	86,322,687
Pondera Coulee	Teton	4,947	140,243	28.349	35,400	387,167
Poplar, East	Roosevelt	276,459	9,989,017	36.132	43,663,246	140,142,466
Poplar, Northeast	Roosevelt	96,567	3,457,388	35.803	1,435,629	17,053,035
Poplar, Southeast	Roosevelt	4,755	169,896	35.730	155,713	881,738
Prairie Elk	McCone	4,852	173,318	35.721	60,064	754,161
Prichard Creek	Toole	5,413	187,912	34.715	111,647	1,147,675
Putnam	Richland	427,905	15,741,341	36.787	2,278,848	48,409,017
Rabbit Hills	Blaine	67,083	1,832,305	27.314	527,766	7,038,268
Ragged Point	Musselshell	45,410	1,608,241	35.416	3,195,535	17,899,549
Rattler Butte	Rosebud	85,503	2,994,315	35.020	202,281	4,574,965
Rattlesnake Coulee	Toole	1,929	66,199	34.318	86,905	590,227
Raymond	Sheridan	378,205	13,653,579	36.101	2,998,197	44,817,890
Raymond, Northeast	Sheridan	4,049	139,889	34.549	116,738	1,616,702
Reagan	Glacier	228,465	7,793,627	34.113	7,062,476	46,630,999

FIELD	COUNTY	PRODUCTION YEAR 1981			CUMULATIVE TO DECEMBER 31, 1981	
		BARRELS	VALUE	AVERAGE	BARRELS	VALUE
				PRICE		
Red Bank	Roosevelt	285,198	10,158,753	35.620	345,682	12,446,076
Red Bank, South	Roosevelt	22,267	736,815	33.090	22,267	736,815
Red Creek	Glacier	65,369	2,272,815	34.769	5,386,514	18,152,643
Red Fox	Roosevelt	3,032	109,486	36.110	367,660	1,372,063
Red Water	Richland	21,995	814,563	37.034	21,995	814,563
Redstone	Sheridan	5,032	177,303	35.235	448,442	1,689,272
Refuge	Sheridan	19,288	700,772	36.332	62,062	2,339,467
Repeat	Carter	9,030	281,610	31.186	484,100	2,103,579
Reserve	Sheridan	68,499	2,433,016	35.519	1,382,199	8,475,232
Richey	Dawson, McCone	19,769	700,831	35.451	1,942,856	5,760,531
Richey	Dawson	1,797	59,301	33.000	1,797	59,301
Richey, Southwest	McCone	7,497	272,134	36.299	1,879,665	5,793,907
Richey Area, West	McCone	4,000	148,668	37.167	11,062	403,670
Ridgelawn	Richland	562,870	20,307,787	36.079	826,150	28,332,107
RipRap Coulee	Roosevelt	43,321	1,533,780	35.405	184,899	3,428,681
River Bend	Richland	21,297	719,242	33.772	21,297	719,242
Rocky Point	Roosevelt	31,803	1,129,166	35.505	92,636	2,171,381
Roscoe Dome	Carbon	4,587	130,216	28.388	6,906	198,144
Rosebud	Rosebud	16,938	595,862	35.179	368,368	5,055,107
Royals	Dawson	35,008	1,272,471	36.348	45,232	1,646,710
Royals, South	Dawson	654	22,890	35.000	654	22,890
Rudyard	Hill	2,464	78,023	31.665	7,219	130,099
Runaway	Teton	644	23,034	35.767	1,555	55,856
Rush Mountain	Sheridan	16,335	576,740	35.307	390,346	2,139,298
Salt Lake	Sheridan	15,157	539,286	35.580	318,427	2,234,705
Sand Creek	Dawson	23,373	809,197	34.621	2,242,444	9,204,366
Scobey	Daniels	1,157	40,495	35.000	3,916	145,674
Second Creek	Richland	57,859	2,078,064	35.916	880,474	12,009,079
Shepherdder	Musselshell	2,723	93,546	34.354	62,203	933,105
Shotgun Creek, North	Roosevelt	6,941	249,001	35.874	79,337	1,236,483
Sidney	Richland	265,957	9,455,835	35.554	1,727,957	28,060,414
Singletree	Roosevelt	4,162	137,621	33.066	59,158	1,042,474
Sioux Pass	Richland	167,110	5,959,319	35.661	2,257,743	30,620,063
Sioux Pass, East	Richland	5,527	195,247	35.326	47,217	771,391
Sioux Pass, Middle	Richland	117,290	4,190,772	35.730	733,159	15,811,615
Sioux Pass, North	Richland	339,218	12,130,775	35.761	1,610,844	33,433,243
Snoose Coulee	Liberty	180	5,921	32.894	180	5,921
Snowden	Roosevelt	56719,800	34.921	1,938	70,607	
Snyder	Big Horn	4,216	123,221	29.227	431,709	1,244,219
Soap Creek	Big Horn	55,260	1,608,398	29.106	2,178,980	10,058,148
Soap Creek, East	Big Horn	9,591	275,252	28.699	57,106	1,085,811
South Fork	Richland	66,324	2,366,772	35.685	568,247	9,799,979
Spring Lake	Richland	19,475	688,285	35.342	721,500	3,204,652
Spring Lake, South	Richland	17,600	626,226	35.581	17,600	626,226
Stampede	Richland	34,215	1,239,267	36.220	40,167	1,460,306
Stensvad	Musselshell, Rosebud	15,482	521,542	33.687	10,036,137	26,233,462
Sumatra	Rosebud	874,533	30,057,699	34.370	38,914,480	211,100,183
Sunnyhill	Sheridan	24,807	894,714	36.067	100,208	2,306,698
Target	Roosevelt	6,945	243,506	35.062	6,945	243,506
Three Buttes	Richland	39,072	1,406,787	36.005	68,516	2,384,599
Tippy Buttes	Musselshell	31,806	1,106,753	34.797	43,651	1,428,954
Tule Creek	Roosevelt	92,920	3,237,704	34.844	7,470,864	27,213,685
Tule Creek, East	Roosevelt	7,883	277,844	35.246	1,967,201	6,051,250
Tule Creek, South	Roosevelt	7,741	278,227	35.942	687,164	2,851,838
Two Medicine Creek	Glacier	2,035	70,391	34.590	10,159	368,071
Two Waters	Richland	17,190	626,507	36.446	44,925	1,688,314
Utopia Swift	Liberty	62,141	2,102,416	33.833	231,388	4,618,233
Vaux	Richland	302,312	10,693,682	35.373	1,104,219	24,155,123
Vida	McCone	1,188	44,164	37.175	255,753	935,664
Volt	Roosevelt	75,938	2,662,386	35.060	2,422,287	12,704,098
Wagon Box	Musselshell	1,015	34,340	33.833	22,039	284,983
Weed Creek	Yellowstone	3,992	134,714	33.714	585,387	2,127,329
Weldon	McCone	18,640	657,079	35.251	7,006,916	19,149,427
West Butte	Toole	16,971	582,105	34.300	241,971	1,782,226
West Fork	Roosevelt	4,411	155,620	35.280	4,411	155,620
Whitlash	Liberty	160,309	5,459,163	34.054	4,545,696	30,553,826
Whitlash, West	Liberty	3,801	128,694	33.858	70,966	648,980

FIELD	COUNTY	PRODUCTION YEAR 1981			CUMULATIVE TO DECEMBER 31, 1981	
		BARRELS	VALUE	AVERAGE PRICE	BARRELS	VALUE
Willow Creek, North	Musselshell	10,112	356,488	35.250	281,406	2,090,641
Willow Ridge	Toole	4,213	144,270	34.244	23,419	536,677
Willow Ridge, South	Toole	96	3,312	34.500	96	3,312
Wills Creek, South	Fallon	34,852	1,188,209	34.093	898,491	4,814,575
Winnett Junction	Musselshell	70,416	2,440,900	34.212	571,212	8,853,696
Wolf Springs	Yellowstone	14,279	503,863	35.287	4,581,227	12,451,815
Woodrow	Dawson	14,417	491,894	34.119	1,045,068	3,654,339
Wrangler	Sheridan	50,671	1,839,459	36.302	131,485	4,878,914
Wrangler, North	Sheridan	14,814	537,970	36.315	42,515	1,620,817
Wright Creek	Powder River	8,988	315,973	35.155	222,575	1,892,672
Yates	Wibaux	10,651	372,785	35.00	10,651	372,785
Wildcat	Dawson	271	10,456	37.749	277	10,456
Wildcat	Sheridan	12,578	443,211	35.237	51,711	547,362
Misc. Abandoned Fields		---	---	---	2,449,991	5,873,103
TOTALS		30,813,411	1,070,084,226	34.728	1,078,688,984	5,394,350,184

MISCELLANEOUS ABANDONED FIELDS AS OF DECEMBER 31, 1981

FIELD	BARRELS	DOLLARS	FIELD	BARRELS	DOLLARS
Bainville	264,518	989,773	Strawberry Creek	90	3,030
Bascom	27,830	65,674	Viking	160	1,957
Blackfoot, East	810	1,730	Wibaux	23,580	42,945
Bloomfield	7,163	18,589	Wolf Creek	1,979	2,275
Bredette, North	488,554	1,160,009	Woman's Pocket	3,526	7,461
Bynum	5,971	15,320	Yellowstone	39,405	72,518
Cadmus	1,173	3,381	Wildcat, Blaine County	9,324	19,667
Chelsea Creek	11,548	43,764	Wildcat, Carbon County	6,368	13,559
Four Buttes	41,067	122,184	Wildcat, Daniels County	3,508	7,787
Gage, Southwest	16,289	37,397	Wildcat, Fallon County	10,683	29,485
Gettysburg	304	11,987	Wildcat, Glacier County	48,231	124,918
Grandview	3,243	6,983	Hill County	161	1,804
Jack Creek	1,310	3,275	Wildcat, Liberty County	3,254	19,148
Katy Lake	1,056	2,872	Wildcat, McCone County	12,575	41,467
Lake Basin	473,639	661,111	Wildcat, Musselshell County	925	1,841
Line Coulee	57,789	138,495	Wildcat, Powder River County	27,445	65,594
Pine, East	19,349	233,378	Wildcat, Richland County	339,856	818,099
Pole Creek	169,726	277,956	Wildcat, Roosevelt County	86,154	236,920
Rattlesnake Butte	5,920	6,592	Wildcat, Stillwater County	11,283	13,365
Rough Creek	3,599	10,583	Wildcat, Toole County	35,809	118,817
Shotgun Creek	76,124	172,616	Wildcat, Wibaux County	8,388	25,416
Smoke Creek	100,305	221,361	TOTALS	2,449,991	5,873,103

1981 - OIL AND GAS DISCOVERIES, EXTENSIONS*, AND NEW PAY ZONES**

CDUNTY	OPERATOR- WELL NAME AND LOCATION	FIELD	TOTAL DEPTH	INITIAL POTENTIAL Oil B/D, Gas MCF/D	PRODUCING FORMATION	DATE COMPLETED
BLAINE	Xeno, Inc., Battle 9-17, 1-26N-18E	Battle Creek*	1,620			6-81
CHOTEAU	General Well Service, Inc., Sada Woods 1-21, 21-27N-3E	Genou	3,975	100	Bow Island	6-80
	NorAm Exploration, Corp, Donald C. Killion 1-19, 19-26N-3E	Buffalo Flat*	1,170	2,341	Bow Island	6-81
DAWSON	Heimerich & Payne, Inc., Pfaff 1-33, 33-22N-52E	South Royals	11,100	50	Dawson Bay	7-81
	Dow Chemical Co., Lynn Casterline 1, 28-23N-50E	East Richey	10,931	44	Charles	10-81
FALLON	Wood Petroleum Corp., Cox 26-1, 26-3N-61E	Gaslight	1,947	560	Eagle Sand	8-81
GLACIER	Rainbow Resources, Two Medicine 1-3, 3-31N-12W	East Glacier	9,835	131	Greenhorn	2-81
	Grand Prix Natural Gas Co., Findley 1, 27-34N-10W	Sharp Lake	3,290	55	Horse Thief	-81
HILL	Smoky Hill Exploration Co., Peterson 1-19, 19-35N-13E	Spring Coulee	3,706	11,159	Sawtooth	8-81
LIBERTY	Macquest Resources Inc., Meissner 13-2-35-5, 2-35N-5E	Snoose Coulee*	1,403	180	Bow Island	1-81
MUSSELSHELL	True Oil Company, Hougden 23-21, 21-10N-30E	Tippy Buttes	5,150	16	Stensvad	6-81
PHILLIPS	Southland Royalty Co., Federal 1860 1, 18-36N-30E	Loring Unit*	2,030	104	Phillips-Bowdoin	11-81
PONDERA	Monterrey Petro. Corp., State 1-10, 10-26N-2E	Hard Pan*	1,255	250	Bow Island	6-80
	Balcron Oil Company, State 1-0, 36-30N-2W	Ledger*	1,310	29	Bow Island	6-81
	Oxy Petroleum Inc., T. Larsen 1-27, 27-28N-6W	Highview*	3,089	47	Madison	9-81
RICHLAND	Louisiana Land & Exploration, Indian Mound Ranch 1, 15-23N-55E	Box Canyon	11,950	26	Red River "C"	5-81
	Louisiana Land & Exploration, TOO #2 FLB Cooper 32-2, 2-23N-55E	No Lambert	12,303	130	Red River "C"	3-81
	Al Aquitaine, Prather Anvik 1-15, 15-25N-58E	Fairview*	9,376	154	Mission Canyon	9-91
	Champlin Petroleum, Colwell/Culbertson, 42-10 #1, 10-27N-56E	River Bend	9,320	68	M. C. & Ratcliffe	3-81
	Tom Brown, Inc., Foss 15-21X, 15-26N-55E	Dugout Creek	12,010	523	Red River	4-81
	Coastal Oil & Gas, CDGC/A1Aq B N #1, 33-24N-54E	North Enid*	11,644	90	Bakken	7-81
	Louisiana Land & Exploration, LL&E TOO-State 12-16, 16-25N-56E	Windmill	12,349	75	Duperow	5-81
	Southland Royalty Company, Richard Hier 1-30, 30-23N-56E	Lambert*	12,030	374	Red River	3-81
	Gulf Oil Corporation, Dbergfell 1-11-1B, 11-23N-57E	Epworth	12,750	383	Red River	4-81
	Al Aquitaine Exploration, Inc., Alomnd #1, 17-25N-58E	Sioux Pass*	12,900	62	Madison	8-81
	Pennzoil Company, Almond #1, 8-23N-59E	Sidney*	12,720	74	Ratcliffe	4-81
	Texaco, Inc., Pennzoil et al #1, 8-22N-58E	Intake II	12,444	621	Red River	6-81
	Heimerich & Payne, Merrill 1-14, 14-22N-57E	Hawk Haven	12,350	83	Mission Canyon	4-81
	Getty Oil Company, Nohley 28-14, 28-25N-59E	E. Fairview*	12,880	2,052	Red River C	5-81
	Champlin Petroleum Company, Colwell #2, 13E-11, 11-27N-56E	River Bend**	12,200	222	Red River	8-81
	Farmers Union Central Exchange, Parsons 14-27, 27-26N-54E	No. Charlie Creek	11,510	32	Nisku	11-81
	Tom Brown, Inc., B N 5-23, 5-25N-55E	Stampede*	11,900	135	Red River "C"	6-81
	Coquina Oil Corporation, Simonsen #1, 12-24N-56E	Lonetree Creek*	12,600	88	Red River	10-81
	BWAB, Inc., Wyman 28-33X, 28-22N-58E	Crane*	12,290	570	Red River	10-81
	Farmers Union Exchange, Bradley 1-5, 5-21N-58E	Crane*	12,260	75	Red River	12-81
	BWAB, Inc. & Tom Brown, Inc., Johnson 9-34, 9-25N-59E	Fairview*	12,930	27	Madison	12-81
	Farmers Union Central Exchange, B N 8-23, 33-26N-54E	No. Charlie Cr.	11,606	2,400	Red River	11-81
	Al Aquitaine Exploration Ltd., N. Hatie COG-BN 2-33, 33-24N-54E	North Enid*	10,400	11	Rat & Miss Can	10-81
ROOSEVELT	Mosbacher Production Co., Pruet-John Peterson 1-13, 13-29N-57E	Burget	12,715	80	Red River	7-81
	Southland Royalty, Paul Wars 1-27, 27-29N-57E	East McCabe	12,580	37	Red River "B"	2-81
	Gulf Oil Corporation, Gobbs 1-16-4B, 16-30N-52E	Lonerider	10,575	17	Duperow	7-81
	Pennzoil Company, Larson Farms 1, 1-27N-58E	Barnville II	12,700	140	Red River	4-81
	Southland Royalty Company, Panasuk 1-5, 5-28N-59E	So. Red Bank	13,000	1,131	Red River "C"	11-81
	Luff Exploration, McCann-Federal 1-9, 9-27N-57E	W. Barnville*	12,484	38	Red River	9-81
	Patrick Petroleum Corp., FLB Toavs 1-16, 16-29N-47E	West Fork	8,029	291	Charles "C"	10-81
	Dome Petroleum Corp., Martin 1-8, 8-29N-58E	Burget*	9,700	32	Mission Canyon	11-81
SHERIDAN	Southland Royalty, Ada G. Nash 1-5, 5-24N-54E	Midby	10,560	291	Red River "C"	1-81
	Beren Corporation, Anderson 1, 11-33N-57E	North Dagmar	11,386	65	Red River "C"	1-81
	Edwin L. Cox, B. R. Cox-Dyerby 1-30, 30-34N-55E	Lariat	11,160	58	Red River	7-81
	Hunt Energy Corporation, Larson Farms 1, 2-32N-55E	Alkali Coulee	11,909	54	Red River	3-81
	Tom Brown, Inc., Lund Ranch 4-32, 4-33N-55E	Green Coulee	11,100	293	Red River "C"	4-81
	Sun Oil Company, Sunmark-State 1-36, 36-33N-55E	Reserve*	11,411	436	Red River	5-81
	Wm. Hunt Trust Estate, Fed-Stringer 1, 14-32N-57E	No. Katy Lake**	11,497	665	Mission Canyon	5-81
	Gulf Oil Corporation, Jorgenson 1-27-3C, 27-34N-57E	Lowell*	11,380	50	Red River	7-81
	Beren Corporation, Arnekelen 1, 5-34N-56E	No. Antelope	11,081	20	Red River "C"	7-81
	Sun Oil Company, E. Goff 1, 22-35N-57E	W. Goose Lake	11,500	259	Red River	10-81
	Heimerich & Payne, Inc., Lund Ranch 1-3, 3-33N-55E	Green Coulee*	11,050	57	Red River	12-81
	Diamond Shamrock Corporation, Langerquist Twin Fee 12-14, 14-36N-57E	Comertown**	6,850	75	Ratcliffe	10-81
	Indrex, Inc., ATOC 1, 20-35N-56E	Plentywood	10,902	142	Red River	11-81
	Tenneco Oil Company, Sunsted 1, 7-33N-57E	Fishhook*	11,500	1,049	Red River	11-81
WIBAUX	Phillips Petroleum Company, Wojohn "A" 5-2, 2-13N-60E	Black Diamond	11,260	152	Red River	12-81
	Phillips Petroleum Company, Lawrence "E" 16-29, 29-14N-60E	Yates	10,100	147	Duperow	9-81

1981 — SUMMARY OF SECONDARY RECOVERY PROJECTS

Field	Formation	Operator	Type of Project	Injection Pattern	Date Inj. Com.	1981 Cumulative Injections	Avg. Daily Inj. Rate	No. of Inj. Wells	Source of Injection Media and Remarks
						M Bbls. or MMCF	Bbls. or MCF		
Ash Creek	Shannon	Transocean, Inc.	Waterflood	Peripheral	10-15-64	9,441	2,329	9	Parkman
Bell Creek Unit "A"	Muddy	Gary	Waterflood	Peripheral	7-1-70	139,910	22,962	52	Madison (Tertiary Began)
Bell Creek Unit "B"	Muddy	Gary	Waterflood	Peripheral	10-1-77	38,260	8,803	12	Madison
Bell Creek Unit "C"	Muddy	Gary	Waterflood	Peripheral	9-1-71	23,395	5,849	5	Madison
Bell Creek Unit "D"	Muddy	Gary	Waterflood	Peripheral	1-1-72	27,907	7,060	9	Madison
Bell Creek Unit "E"	Muddy	Gary	Waterflood	Peripheral	1-1-72	21,351	5,310	14	Madison
Bell Creek Ranch Unit	Muddy	Gary	Waterflood	Peripheral	3-1-71	38,061	4,658	8	Madison
Big Wall	Tyler B	Texaco, Inc	Waterflood	Random	8-20-66	26,265	4,540	3	Produced, Amsden & Tyler
Blackfoot	Cut Bank	Croft Petroleum Co.	Waterflood	Random	7-1-76	965	619	3	Madison
Old Border Unit	Cut Bank	BG&O Co.	Waterflood	Random	6-1-73	-0-	-0-	-0-	Madison
Bowes	Sawtooth	Texaco, Inc	Waterflood	Random	5-26-61	-0-	-0-	-0-	Madison
Cabin Creek	Siluro-Ord	Shell	Waterflood	Semi-Peripheral	6-12-59	111,565	32	27	Produced & Fox Hills, (Cum to 9/1/80)
Cat Creek, East Dome Unit	Swift	Hoss	Waterflood	Semi-Peripheral	7-30-70	809	189	4	Third Cat Creek Sand
Cat Creek, Unit #1	1st Cat Creek	Farmers' Union	Waterflood	Semi-Peripheral	10-10-62	6,572	370	2	Third Cat Creek Sand
Cat Creek, Unit #1	2nd Cat Creek	Farmers' Union	Waterflood	Semi-Peripheral	10-10-62	7,522	1,315	3	Third Cat Creek Sand
Cat Creek, Unit #2	1st Cat Creek	Farmers' Union	Waterflood	Semi-Peripheral	12-1-59	9,464	68	1	Third Cat Creek Sand
Cat Creek, Unit #2	2nd Cat Creek	Farmers' Union	Waterflood	Semi-Peripheral	12-1-59	10,230	1,063	3	Third Cat Creek Sand
Cat Creek, Mosby Dome	Swift	Farmers' Union	Waterflood	Random	7-67	5,214	693	3	Third Cat Creek Sand
Cat Creek, Mosby Dome	Amsden	Farmers' Union	Waterflood	Random	6-1-71	274	99	1	Third Cat Creek Sand
Cut Bank, Marina Cut Bank	Cut Bank	BG&O Co	Waterflood	5-Spot	6-72	-0-	-0-	-0-	Madison
Cut Bank, Tweedy	Cut Bank	BG&O Co.	Waterflood	5-Spot	6-72	-0-	-0-	2	Madison
Cut Bank, Northeast	Cut Bank	Texaco, Inc	Waterflood	5-Spot	6-2-63	-0-	-0-	SI	Madison
Cut Bank, Northwest	Cut Bank	Phillips	Waterflood	5-Spot	1-30-62	17,339	1,263	11	Madison
Cut Bank, Northcentral	Cut Bank	Phillips	Waterflood	5-Spot	5-78	2,614	2,203	22	Madison
Cut Bank, Southeast	Cut Bank	Texaco, Inc	Waterflood	5-Spot	4-62	-0-	-0-	38	Madison
Cut Bank, Southwest	Cut Bank	Phillips	Waterflood	5-Spot	9-62	103,722	13,734	76	Madison
Cut Bank, Southcentral	Cut Bank	Union	Waterflood	5-Spot	5-63	39,770	3,277	14	Madison
Cut Bank	Lander "A"	Phillips	Waterflood	Random	4-65	1,801	241	2	Madison
Cut Bank	Lander	Texaco, Inc	Waterflood	Random	7-64	12,063	14,547	3	Eagle (abandoned)
Cut Bank, McGuiness	Moulton	Union	Waterflood	Random	12-62	5,603	932	1	Madison
Cut Bank	Cut Bank	Oamson	Waterflood	5-Spot	9-1-71	5,299	751	14	Madison
Cut Bank, Two Medicine	Cut Bank	Conoco	Waterflood	Random	12-67	48,942	9,419	81	Madison
Cut Bank, Dalquist	Cut Bank	Union	Waterflood	Random	11-12-79	-0-	-0-	SI	Madison
Cut Bank, Northeast Darling Unit	Moulton	Ralph Fair	Waterflood	Random	2-68	5,774	222	2	Produced Water
Cut Bank, Darling State	Moulton	BG&O Co	Waterflood	Random	2-67	-0-	-0-	SI	Madison
Cut Bank, Darling South Swenson	Moulton	BG&O Co	Waterflood	Random	2-67	-0-	-0-	SI	Madison
Dean Dome	Greybull	Eastern American	Steam Injection	Cyclic	8-29-81	7,000	-0-	1	
Dwyer	Ratcliffe	Phillips	Waterflood	Peripheral	10-68	3,740	1,504	5	Madison
Elk Basin	Embar-Tensleep	Amoco	Gas Injection	Crestal	12-72	-0-	-0-	-0-	Produced Gas (None)
Elk Basin, Unit #2	Embar-Tensleep	Amoco	Waterflood	Random	1949	-0-	-0-	-0-	Produced Water
Elk Basin	Frontier	Amoco	Waterflood	Random	1926	-0-	-0-	-0-	Produced Water
Elk Basin, Madison Unit #2	Madison	Amoco	Waterflood	Peripheral	1962	-0-	-0-	-0-	Produced Water
Elk Basin, Northwest	Tensleep	ARCO	Waterflood	Semi-Peripheral	5-76	10,093	203	2	Madison Produced Water
Fairview, Northwest Unit	Red River	Superior	Gas Injection	Crestal	10-25-67	-0-	-0-	-0-	Produced Gas
Flat Coulee	Swift	Phillips	Waterflood	Peripheral	2-1-72	7,112	2,107	14	Eagle
Flat Lake	Ratcliffe	Chevron	Waterflood	Random	6-1-71	29,290	10,104	12	Produced Water
Frannie	Tensleep	Continental	Waterflood	Random	11-20-70	110,834	41,455	29	Produced Water
Fred & George Creek	Sunburst	Fulton	Waterflood	Random	7-70	30,916	8,847	2	Madison & Eagle
Gas City	Red River	Shell	Waterflood	Semi-Peripheral	10-31-69	-0-	-0-	SI	Mission Canyon
Goose lake	Ratcliffe	Cotton Petroleum	Waterflood	Semi-Peripheral	1-73	11,509	5,677	5	Produced Water
Gumbo Ridge	Tyler B	Burlington Northern Inc	Waterflood	Semi-Peripheral	6-1-80	517	962	2	Produced Water & 3rd Cat Creek
High Five	Stensvad	Grace Petroleum	Waterflood	Random	—	-0-	-0-	-0-	Produced Water & Cat Creek Sands (not initiated) (approved 9-11-80)
Jim Coulee	Tyler B	McAlester Fuel	Waterflood	Semi-Peripheral	7-72	10,891	3,063	5	Produced Water & 3rd Cat Creek
Keg Coulee, Northwest Unit	Tyler B	Flatt Corp	Waterflood	Semi-Peripheral	8-31-66	7,530	4,858	1	Madison
Keg Coulee, East	Tyler	Juniper Petroleum Corp.	Waterflood	Semi-Peripheral	12-24-69	-0-	-0-	-0-	3rd Cat Creek
Keg Coulee, South	Tyler	BG&O Co	Waterflood	Semi-Peripheral	1-1-70	-0-	-0-	-0-	Madison
Kelly	Tyler	McAlester Fuel	Waterflood	Random	7-69	3,365	712	1	Produced Water & 3rd Cat Creek
Kevin-Sunburst	Madison	BG&O Co	Waterflood	Random	8-64	-0-	-0-	-0-	Madison
Kevin-Sunburst	Madison	Texaco, Inc.	Waterflood	Semi-Peripheral	8-64	11,883	2,712	9	Madison (projected figure)
Laird Creek	Swift	Burlington Northern Inc	Waterflood	Semi-Peripheral	2-25-77	802	268	1	Sawtooth (TA 7-B1)
Laurel	Dakota	Lakota Energy	Gas Injection	Random	—	-0-	-0-	-0-	Muddy (not initiated)
Little Beaver	Red River	Shell	Waterflood	Semi-Peripheral	8-7-66	-0-	-0-	-0-	Produced Water (insufficient data)
Little Beaver, East	Red River	Shell	Waterflood	Semi-Peripheral	4-65	-0-	-0-	-0-	Red River Minnelusa
Lookout Butte (Coral Creek)	Red River	Shell	Waterflood	Semi-Peripheral	4-67	-0-	-0-	-0-	Minnelusa (Cum to 9/1/80)
Lookout Butte (Coral Creek)	Mip & Ord Commingled	Shell	Waterflood	Semi-Peripheral	9-76	-0-	-0-	-0-	Minnelusa (Cum to 9/1/80) (2/69-9/76 Cum RR 1,625 & Mip 1,993 M bbls)
Pennel	Stony Mtn & Red River	Shell	Waterflood	Random	8-28-69	-0-	-0-	-0-	Oakota & Produced (Cum to 9/1/80)
Pine, North	Silurian-Ord.	Shell	Waterflood	Semi-Peripheral	3-68	-0-	-0-	-0-	Lodgepole (Cum to 9/1/80)
Pine, South	Red River	Shell	Waterflood	Semi-Peripheral	3-59	-0-	-0-	-0-	Fox Hills & Produced (Cum to 9/1/80)
Prichard Creek	Sunburst	Fulton	Waterflood	Random	4-73	409	521	1	Eagle
Ragged Point	Tyler	Buttes Resources	Waterflood	Semi-Peripheral	12-3-66	8,452	1,893	5	Third Cat Creek (projected figure)

Field	Formation	Operator	Type of Project	Injection Pattern	Date Inj. Com.	Cumulative Injections M Bbls. or MMCF	Avg. Daily Inj. Rate Bbls. or MCF	No. of Inj. Wells	Source of Injection Media and Remarks
Reagan	Madison	Union	Waterflood	Random	7-73	2,457	5,658	4	Produced Water
Reagan	Madison	Union	Gas Injection	Random	8-61	-0-	-0-	-0-	Associated Gas
Red Creek	Cut Bank	Exxon	Waterflood	5-Spot	6-65	15,381	2,611	5	Madison
Richey, Southwest	Dawson Bay & Interlake	ARCO	Waterflood	Random	12-65	2,592	195	1	Fox Hills
Stensvad	Tyler	Tomahawk Oil Company	Waterflood	Semi-Peripheral	2-63	28,244	96	1	Madison
Sumatra, Grebe	Tyler	F U C E	Waterflood	Random	6-16-75	-0-	-0-	SI	Madison & Produced Water
Sumatra	Tyler	Butte Resources	Waterflood	Semi-Peripheral	6-80	520	142	1	Madison
Sumatra, Central	Tyler	Texaco, Inc	Waterflood	Semi-Peripheral	9-16-69	104,711	20,277	34	Madison & Produced Water
Sumatra, Northeast	Tyler	Texaco, Inc	Waterflood	Semi-Peripheral	9-16-69	7,122	2,038	6	Madison & Produced Water
Sumatra, Southeast	Tyler	Butte Resources	Waterflood	Semi-Peripheral	12-1-69	-0-	-0-	7	Madison
Sumatra, West	Tyler	Continental	Waterflood	Semi-Peripheral	10-68	35,719	11,003	9	Produced Water
Sumatra, Kincheloe	Tyler	Exeter Exploration	Waterflood	Semi-Peripheral	—	-0-	-0-	-0-	Madison (not initiated) (approved 6/13/80)
Winnett Junction	Tyler	Petro-Lewis	Waterflood	Random	10-1-77	404	1,107	2	Produced Water

OIL AND GAS FIELDS

Field, Formation, Age	No. Prod. Wells	Type of Trap	Probable Drive Mechanism	Spacing Regulations, Field Rules, and Remarks	Secondary or Water Disposal
ALKALI COULEE Red River (Ord.)	1	Structural	Depletion	320 Acre spacing units; well location no closer than 660' from unit boundary and no closer than 1650' from well producing from the same pool. (Order 77-81.)	None
ALMA Greenhorn (U. Cret.)	1	Structural	Depletion	640-acre spacing units. Location to be no closer than 990' from spacing unit boundary. (Order 19-77.)	None
Blackleaf & Bow Island (L. Cret.)	1	Strat.			
Sawtooth (M. Jur.) (Shut-in)	1				
AMANDA Swift (U. Jur.)	1	Strat.	Depletion	320-acre spacing units for gas with one well per horizon from the base of the Swift to the surface to be located no closer than 660' from unit boundary. Spacing Unit to consist of two contiguous quarter sections lying within one or two governmental sections (Order 76-79).	None
Cut Bank (L. Cret.) (Shut-in)	1				
ANDES Red River (Ord.)	1	Structural	Water Drive	State-wide.	None
Mission Canyon (Miss.)					
ANTELOPE COULEE Blackleaf (L. Cret.)		Structural	Water Drive	State-wide	None
(Shut-in)	3	Strat.			
ANVIL Red River (Ord.)	2	Structural-	Water Drive	State-wide.	None
Nisku (Dev.)	1	Strat.			
ANVIL, NORTH Ratcliffe (Miss.)	1	Structural-	Water Drive	State-wide	None
Red River		Strat.			
ARCH APEX Bow Island (L. Cret.) Gas	18	Strat.	Volumetric	330' from legal subdivision, 2400' from any other drilling or producible gas well producing from the same reservoir; 75' topographic tolerance. (Order 4-60.) Sometimes called Colorado Blackleaf pool. (Swift) State-wide.	None
Swift (U. Jur.) (Shut-in)	5	Strat.			
Sunburst (L. Cret.) Oil	5	Strat.	Depletion		
(Shut-in)	6				
ASH CREEK Shannon (U. Cret.)	3	Structural	Partial Water	Spacing waived within unitized portion of field except no well may be drilled closer than 660' from unit boundary (Order 4-65.)	Waterflood started October, 1964 (Orders 22-64, 15-66.)
(Shut-in)	1		Drive and Depletion		
ASSINIBOINE CREEK Niobrara (U. Cret.)	1	Structural	Depletion	State-wide.	None
(Shut-in)					
BADLANDS Eagle (U. Cret.) Gas	7	Structural	Volumetric	Drilling and spacing units allow one well per governmental section to be located anywhere within a section but no closer than 990' from a section line (Order 22-78.)	None
(Shut-in)	1	Strat			
BAINVILLE Red River (Ord.)	1	Structural-	Depletion-	State-wide.	Produced Water disposed into Red River formation. (Order 7-A-75.)
(Shut-in)		Strat.	Water Drive		
BAINVILLE, NORTH Winnepegosis (Dev.)	2	Structural	Water Drive	320-acre spacing units to consist of two governmental quarter sections located in either one or two governmental sections. Wells to be located no closer than 660' to unit boundary and no closer than 1650' to any well producing from the same formation. (Order 84-79). (Board Order 84-79) is amended to permit a tolerance of 150' from the well location requirements of said order for topographic purposes (Order 39-80).	None
Red River (Ord.)	5				
Ratcliffe (Miss.)	1				

Field, Formation, Age	No. Prod. Wells	Type of Trap	Probable Drive Mechanism	Spacing Regulations, Field Rules, and Remarks	Secondary or Water Disposal
BAINVILLE, WEST					
Ratcliffe (Miss.)	1	Structural-	Depletion-	320-acre spacing units to consist of two govern- mental quarter sections that may be in either one or two governmental sections. Location to be no closer than 660' to the unit boundary or closer than 1650' to another producing well within the field. (Order 19-78.) (Amendment to Order 19-78 by Order 42-79.) 320-Acre spacing units aligned in east-west direction with permitted well to be no closer than 660' to unit boundary (Order 57-80.)	None
Red River (Ord.)	3	Strat.	Water Drive		
BAINVILLE II					
Red River (Ord.)	1	Structural	Water Drive	320-acre spacing.	None
BANNATYNE					
Swift (U. Jur.)	14	Structural	Comb. Water	Center of 10-acre tracts, 50' topographic toler- ance. Commingling permitted. (Order 20-58.)	Pilot waterflood of Swift suspen- ded in 1963.
Sun River (U. Miss.) (Shut-in)	3		Drive and Volumetric		
BATTLE CREEK					
Eagle (U. Cret.) Gas	24	Structural	Volumetric	State-wide.	None
BEARS DEN					
Swift (U. Jur.) Oil	7	Structural	Depletion and	State-wide.	None
Sawtooth (Jur.) Gas (Shut-in)	3		Gas Cap Drive		
Sunburst (L. Cret.) Gas (Shut-in)					
BELFRY					
Tensleep (Penn.)	1	Structural	Water Drive	State-wide.	None
BELL CREEK					
Muddy (L. Cret.) Oil & Gas	176	Strat.	Depletion	Originally 40-acre spacing units with location 660' from unit boundary with 150' tolerance for topo- graphic reasons only. (Orders 37-67, 39-67, 50-67, 1-69, 17-70.) Field now unitized. Tertiary program, see (Order 25-80).	Six areas unitized (Unit 'A', 'B', Ranch Creek, 'C', 'D', and 'E'.) Floods used Madison water. (Orders 7-70, 23-70, 8-71 26-71, 35-71, 36-71.)
Gas (Shut-in)	1				
BELL CREEK SOUTHEAST					
Muddy (L. Cret.) Gas	2	Strat.	Depletion	160-acre spacing units, wells 660' from spacing boundary. (Order 31-72.)	None
(Shut-in) (TA)	1				
BENRUD					
Nisku (Dev.)	2	Structural	Water Drive	160-acre spacing units with permitted location within a 1320' square in center of quarter section. (Order 6-65.)	Water disposal into Judith River formation. (Order 64-62.)
BENRUD, EAST					
Nisku (Dev.)	3	Structural	Water Drive	Same as Benrud Field. (Order 6-65.)	Water disposal into Judith River formation. (Orders 64-62, 32-66, 4-A-73.)
BENRUD, NORTHEAST					
Nisku (Dev.)	1	Structural	Water Drive	Same as Benrud Field. (Order 6-65.)	Water disposal into Judith River formation. (Order 32-66.)
BERTHELOTE					
Sunburst (L. Cret.)	1	Strat.	Depletion	40-acre spacing units with well no closer than 330' from lease or property line and no closer than 660' between wells. (Order 18-66.)	None
(Shut-in)	1				
BIG COULEE					
3rd Cat Creek (L. Cret.) Gas	9	Structural	Water Drive	State-wide.	None
(Shut-in)	1				
Morrison (U. Jur.) Gas	1	Structural	Water Drive		
BIG GULLY					
L. Tyler (Penn.)	2	Strat.	Depletion	State-wide.	None

Field, Formation, Age	No. Prod. Wells	Type of Trap	Probable Drive Mechanism	Spacing Regulations, Field Rules, and Remarks	Secondary or Water Disposal
BIG GULLY, NORTH L. Tyler (Penn.)	1	Strat.	Depletion	State-wide.	None
BIG MUDDY CREEK Interlake (Sil.) (Shut-in)	1	Structural	Water Drive	One well per 320 acre spacing unit with well no closer than 660 feet from boundary of four east-west units. (Order 4-75.)	None
Red River (Ord.)	3				
Mission Canyon	1				
BIG ROCK Blackleaf (L. Cret.) Gas	14	Strat.	Depletion	640-acre spacing units for Blackleaf "A" formation. Location to be no closer than 990' to any governmental section line. (Order 31-78.)	None
BIG WALL Amsden (Penn.)	2	Structural	Water Drive	Spaced by old state-wide spacing; 330' from lease or property line, 990' between wells in same reservoir. (Order 12-54.)	Previous disposal into Tyler "A" stopped in 1961. Waterflood of Tyler "B" sand started August, 1966. (Order 22-66.) Excess produced water disposed into the Tyler "B" formation. (Order 13-A-77.)
Tyler (Penn.)	8	Structural-	Depletion		
(Shut-in)	7	Strat.			
BIG WALL, NORTH Stensvad (Penn.)	1	Structural-Strat.	Water Drive	State-wide.	None
BILLS COULEE Sunburst (L. Cret.) Madison	3	Strat.	Depletion	Field without restrictions except that no well may be drilled closer than 330' from the exterior boundary of the field. (Order 22-80).	None
(Miss.) Gas					
(Shut-in)	2				
BLACK BUTTE Eagle (U. Cret.) Gas	2	Structural Strat.	Volumetric	320-Acre spacing units consisting of either the N/2 and S/2 or E/2 and W/2 of the section with well location to be no closer than 990' from a section line nor closer than 660' to the interior boundary. (Order 134-80).	None
BLACK COULEE Eagle (U. Cret.) Gas	7	Structural-Strat.	Water Drive	320-acre spacing units; well to be located no closer than 990' from unit boundary (Order 6-73.) Well location to be no closer than 660' to eastern boundary of Black Coulee Field. (Order 37-79.) Field extension. (Order 71-79.)	None
BLACK DIAMOND Red River (Ord.)	1	Structural	Depletion	320 Acre spacing units; well location no closer than 660' from unit boundary. (Order 147-81.)	
BLACKFOOT Cut Bank (L. Cret.) -	6	Strat.	Depletion	One well only per 40-acre spacing unit, 300' tolerance from center of spacing unit. Dual completion in Cut Bank and Madison with administrative approval. (Order 3-57.)	Waterflood started November, 1976. (Order 34-76.)
Madison (Miss.)					
Sunburst (L. Cret.)	1				
BLACKFOOT-SHALLOW GAS Dakota (L. Cret.)	7	Structural Strat.	Volumetric Depletion	640-acre spacing units; one well per section per producing horizon above the Kootenai with location to be no closer than 990' to unit boundaries. (Order 121-80.)	None
BLACK JACK Sunburst (L. Cret.) Gas	10	Strat.	Depletion	One gas well per 160-acres, no closer than 660' from boundary of each unit. (Order 3-69.) State-wide spacing. Order 3-69 amended to include Blackleaf in spacing and field rules for gas. (Order 4-74.) Blackleaf gas pooled. (Order 3-75.)	None
Swift (U. Jur.) Gas & Oil (Shut-in)	2				
Blackleaf (U. Cret.) Gas	1				

Field, Formation, Age	No. Prod. Wells	Type of Trap	Probable Drive Mechanism	Spacing Regulations, Field Rules, and Remarks	Secondary or Water Disposal
BLACKLEAF CANYON Sun River (Miss.) Gas	4	Structural Strat.	Volumetric Depletion	Single spacing unit with Blackleaf Federal 1-A as designated well. (Order 84-81).	None
BLACKLEAF UNIT Sun River (Miss.) (Shut-in)	4 1			Well spacing requirements set forth in 82-11-201 MCA and Board Rule 36.22.702 are suspended provided no well drilled to be closer than 990' from unit boundary. (Order 47-81.)	None
BLUE HILL Red River (Ord.)	1	Structural	Water Drive	State-wide.	None
BORDER Cut Bank (L. Cret.) Oil & Gas (Shut-in) Cut Bank (L. Cret.) Gas	9 2 2	Strat.	Depletion	Oil: Unitized into New and Old Border fields. Unitized 6-1-73. (Orders 8-73, 9-73.) Gas: 330' from boundary of legal subdivision. 2,400' between wells in same formation on same lease. 75' topographic tolerance. (Order 7-54.)	Waterflood approved. (Orders 8-73, 9-73, 28-73.)
BOULDER Duperow (Dev.)	1	Structural	Water Drive	State-wide spacing (Order 16-71)	None
BOWDOIN & ADJ. AREA Bowdoin & Phillips sands in Colorado Shale (U. Cret.) Gas (Shut-in)	546 75	Structural	Volumetric	One well per quarter section not less than 1000' from lease boundary or less than 2000' from any gas well in same horizon. (Order 29-55.) Unitized 1958. Delineated: (Order 3-72.)	Produced water injected into Phillips Sand-Ashfield unit. (Order 10-A-77.)
BOWES Eagle (U. Cret.) Gas (Shut-in)	30 7	Structural	Volumetric	660' from boundary of legal subdivision, 1320' from other wells in same formation. 75' topographic tolerance. (Order 23-54.) Order 23-54 amended by establishing 160-acre Eagle spacing units in Sec. 5, 6, 7, 8, 17, 18-31N-19E. (Order 44-75.)	None
Sawtooth (M. Jur.) Oil (Shut-in)	54 24	Structural	Partial Water Drive	330' from lease or property line, 990' between wells in the same formation. (Order 13-54.)	Pilot waterflood initiated in 1961 and expanded to fieldwide waterflood in 1965. (Order 6-61.) Water from Madison.
BOX CANYON Red River (Ord.)	2	Structural	Depletion Water Drive	State-wide.	None
BOX ELDER Nisku (Dev.)	1	Structural	Water Drive	State-wide.	None
BRADLEY Cut Bank (L. Cret.) Gas (Shut-in) Madison (Miss.) Sunburst (L. Cret.)	1 1 2	Structural	Water Drive	State-wide.	None
BRADY Sunburst (L. Cret.)	11	Strat.	Depletion Partial Water Drive	10-acre spacing units with 75' topographic tolerance from center of spacing unit. (Orders 34-62, 55-62.) Field enlargement. Operators may commingle production from Burwash and Sunburst formations in Sec. 16. (Order 86-81.)	None
BREDETTE Charles	1	Strat.	Water Drive		
BREED CREEK Tyler (Penn.) (Shut-in)	4 2	Strat.	Depletion	State-wide.	None
BROKEN BOW Blackleaf (L. Cret.) Gas	1	Strat.	Depletion	State-wide.	None

Field, Formation, Age	No. Prod. Wells	Type of Trap	Probable Drive Mechanism	Spacing Regulations, Field Rules, and Remarks	Secondary or Water Disposal
BRORSON					
Mission Canyon (Miss.) Oil & Gas	4	Structural	Volumetric Water Drive	One well per 160-acre unit, no closer than 660' from unit boundary (Mission Canyon and Red River.) (Order 5-69.) Gas to Brorson Field Plant	Produced water injected into Dakota formation. (Order 129-A-81.)
(Shut-in)	1				
Red River (Ord.) Oil & Gas	2				
(Shut-in)	1				
Ratcliffe (Miss.) Oil	1				
BRORSON, SOUTH					
Red River (Ord.) Oil & Gas	3	Structural	Volumetric Water Drive	One well per 160-acre unit, no closer than 660' from unit boundary. (Order 26-68.) Gas to Brorson Field Plant. Reduced Field Area. (Order 26-77.)	None
(Shut-in)	1				
Madison					
BROWN'S COULEE					
Judith River (U. Cret.) Gas	3	Structural	Volumetric	One well per 160-acre unit with well location no closer than 660' from unit boundary. Commingling permitted with administrative approval. (Order 7-74.)	None
Eagle (U. Cret.) Gas					
BROWN'S COULEE, EAST					
Eagle (U. Cret.) Gas	5	Structural	Volumetric	State-wide.	None
(Shut-in)	4				
BRUSH LAKE					
Red River (Ord.) Oil & Gas	5	Structural- Strat.	Depletion Water Drive	320-acre spacing with initial nine spacing units described in (Order 15-71 corrected.)	None
(Shut-in)	2				
BUFFALO FLAT					
Bow Island (L. Cret.) Gas	3	Structural	Volumetric	Statewide.	None
BULLWACKER					
Judith River (U. Cret.) Gas	4	Structural	Volumetric	One well per 320-acre spacing unit with well location no closer than 660' from unit boundary and 990' from field boundary. (Order 26-74.)	None
(Shut-in)	2				
Eagle-Virgelle (U. Cret.) Gas	37				
(Shut-in)	9				
BURGET					
Red River (Ord.)	1	Struc.	Water Drive	320-acre spacing units; Well location to be no closer than 660' to unit boundary and 1650' from existing well. 150' tolerance for topographic reasons. (Order 25-81)	None
BURGET, EAST					
Ratcliffe (Miss.)	1	Strat.	Water Drive		N o n e
BURNS CREEK					
Red River (Ord.)	2	Structural	Oepletion Water Drive	State-wide.	None
BUTCHER CREEK					
Greybull (L. Cret.)				Order 17-60 amended to provide wells may be drilled anywhere within field but no closer than 160' from another producing well or 320' from exterior boundary. Each well may be used for steam stimulation in Greybull formation. (Order 100-81).	
CABIN CREEK					
Mission Canyon (Miss.) Oil & Gas	8	Structural	Water Drive Depletion	Spacing waived and General Rules for (Deviation), (Commingling), and (Dual Completion) are suspended until present Unit Agreement becomes in-operative. (Order 36-62.) Many wells produce from both Interlake and Red River by dual completions. Gas through extraction plant.	Waterflood of Siluro-Ordovician reservoir has been expanded to full scale peripherla flood (Orders 60-62, 30-63.)
(Shut-in)	16				
Interlake-Red River Oil & Gas	82	Structural	Water Drive Oepletion		
(Sil.) (Ord.) (Shut-in)	6				

Field, Formation, Age	No. Prod Wells	Type of Trap	Probable Drive Mechanism	Spacing Regulations, Field Rules, and Remarks	Secondary or Water Disposal
CAMP CREEK Claggett (U. Cret.) Gas	1	Structural	Volumetric	Statewide.	None
CANADIAN COULEE Sawtooth (M. Jur.) Gas (Shut-in)	1 2	Structural- Strat.	Volumetric	320-acre spacing units with well location no closer than 660' from unit boundary, and 990' from field exterior boundaries. (Order 18-76.)	None
CANADIAN COULEE, NORTH Sawtooth (M. Jur.) Gas (Shut-in)	4 2	Structural- Strat.	Volumetric	640-acre spacing units. Location to be no closer than 1650' to section line (Order 15-75.)	None
CANAL Red River (Ord.) Mission Canyon (Miss.) (Shut-in)	1 1	Structural Structural	Water Drive Depletion	320-acre spacing units consisting of East half and West half of governmental section. (Order 34-70.)	None
CANNON BALL Red River (Ord.)	1	Structural	Water Drive	State-wide.	None
CARLYLE Red River (Ord.)	2	Structural	Water Drive	320-acre spacing units; to consist of either the N/2 or S/2 or E/2 or W/2 of section or lots corresponding thereto. Well location to be no closer than 660' to unit boundary nor closer than 1650' to any well drilling or producing from the same pool. (Order 39-79.)	Produced water disposed into Dakota formation. (Order 126-A-81.)
CAT CREEK Kootenai (L. Cret.) (3 Sands) (3 sands) (Shut-in) Morrison (U. Jur.) Ellis (U. Jur.) (Shut-in) Amsden (Penn.)	40 1 2 26 2 2	Structural- Strat. Structural- Strat. Structural Structural	Water Drive Water Drive Depletion- Water Drive Water Drive	220' from lease or property line, 440' from every other well in same formation. (Order 17-55.) Five separate producing areas, East, Antelope, Mosby, West and Landheim Domes. State-wide.	Three Kootenai, two Ellis, and one Amsden waterflood in progress. (Orders 17-56, 18-59, 13-62, 8-68, 38-70, 11-71.) Water from Third Cat Creek sand. Waterflood modified. (Order 29-74.)
CEDAR CREEK Judith River (U. Cret.) Gas (Shut-in) Eagle (U. Cret.) Gas (Shut-in)	79 9 66 6	Structural Structural	Volumetric Volumetric	1200' from legal subdivision line, 2400' from every other well in same formation. (Order 33-54.) 320-acre spacing units, Wells in center of NW¼ and SE¼ of each section with 200' topographic tolerance. (Order 1-61.) Field extension (Order 23-76.)	None None
CHAIN LAKES Eagle (U. Cret.) (Shut-in)	3 2	Structural	Volumetric	State-wide.	None
CHARLIE CREEK Nisku (Dev.) Duperow (Dev.)	1 1	Structural Structural	Water Drive Water Drive	320-acre spacing units, either east-west or north-south at option of operator, located no closer than 660' from spacing unit boundary and no closer than 1650' from another producing well. Spacing units may not cross section lines. (Order 66-76.)	None
CHARLIE CREEK, EAST Red River (Ord.)	1	Structural	Water Drive	Statewide.	None
CHESTER Bow Island (L. Cret.)	1	Structural	Volumetric	State-wide.	None
CHINOOK, EAST Eagle (U. Cret.)	3	Structural- Strat.	Volumetric	State-wide.	None

Field, Formation, Age	No. Prod Wells	Type of Trap	Probable Drive Mechanism	Spacing Regulations, Field Rules, and Remarks	Secondary or Water Disposal
CHIP CREEK Eagle-Virgelle (U. Cret.)	3	Structural- Strat.	Volumetric	160-acre spacing units. Location no closer than 660' from spacing unit boundary. (Order 89-76.)	None
CLARK'S FORK Frontier (U. Cret.) (Shut-in)	1	Structural-	Depletion	330' from quarter-quarter section line, 1320' between wells with 75' topographic tolerance. (Order 17-54.)	None
CLARK'S FORK, NORTH Lakota (L. Cret.) Gas & Oil (Shut-in)	2 1	Structural- Strat.	Volumetric	160-acre quarter section spacing with location no closer than 660' from spacing unit boundary. (Order 23-75.)	None
CLARK'S FORK, SOUTH Greybull (L. Cret.) Oil & Gas (Shut-in)	2 1	Structural- Strat.	Depletion- Water Drive	160-acre spacing, location no closer than 330' from quarter section line or 1320' from any other well.	None
CLEAR LAKE Red River (Ord.) Mission Canyon (Miss.) Nisku	5 1	Structural	Water Drive	State-wide.	Produced water disposed into Dakota, Muddy, Lakota, & Swift formation. (Order 41-A-80.) and (Order 116-A-81.) (60-A-80.), (91-A-80.), (Order 123-A-81.)
CLEAR LAKE SOUTH Red River (Ord.) Nisku (Dev.)	2 2	Structural	Water Drive	State-wide.	None
COAL COULEE Eagle (U. Cret.) Gas	1	Structural- Strat.	Volumetric	One well per governmental section, to be located no closer than 990' from section line and only one well permitted per formation (Order 25-78.) Amendment to (Order 25-78.) provides 320-acre spacing units within certain sections to be designated by the operator. Well to be located no closer than 990' to unit boundary. (Order 36-79.)	None
COAL RIDGE Mission Canyon (Miss.)	1	Structural	Water Drive	State-wide.	Produced water injected into the Dakota formation (Order 81-A-79.)
COLORED CANYON Red River (Ord.)	1	Structural- Strat.	Water Drive	State-wide.	None
COMERTOWN Red River (Ord.)	2	Structural- Strat.	Water Drive	320-acre spacing units; permitted well to be no closer than 660' to unit boundary. (Order 35-80.) Field enlargement (Orders 9-81 and 150-81.)	None
CONRAD BUTTE (See Ledger Field)					
CONRAD SOUTH Dakota (L. Cret.) (Shut-in)	3 9	Strat.	Depletion	10-acre spacing units. Wells in center of each unit with 75' topographic tolerance. (Orders 34-62, 31-63.)	None
COW CREEK Charles (Miss.)	1	Structural	Water Drive	80-acre spacing units, direction at option of operator but wells to be in SW¼ and NE¼ of each quarter section. (Order 11-69.)	None
COW CREEK, EAST Kibbey (Miss.)	11	Structural	Water Drive	40-acre spacing units consisting of quarter-quarter section with permitted well to be at center with 150' topographic tolerance. (Order 35-74.)	Produced water disposed into Dakota formation. (Order 30-A-75 and 61-A-76.)

Field, Formation, Age	No. Prod. Wells	Type of Trap	Probable Drive Mechanism	Spacing Regulations, Field Rules, and Remarks	Secondary or Water Disposal
CRANE					
Red River (Ord.)	1	Structural-	Water Drive	320-acre spacing units consisting of one half of a governmental section with well location to be no closer than 660' from unit boundary and no closer than 1650' to any well drilling or producing from the same pool (Order 40-79.)	None
Duperow (Dev.) (Shut-in)	2	Strat.			
CULBERTSON					
Red River (Ord.)	1	Structural- Strat.	Depletion- Water Drive	State-wide in part. Unitized as to SE¼ of Section 32, SW¼ of Section 33, N½NW¼ of Section 4, and N½NE¼ of Section 5. (Order 29-70.)	Produced water disposed into Red River formation. (Order 13-A-72.)
CUPTON					
Red River (Ord.)	9	Structural-	Water Drive	160-acre quarter section spacing units. Location no closer than 660' from spacing unit boundary. (Order 4-72.)	Produced water disposed into Red River formation. (Order 1-A-80.)
(Shut-in)	2	Strat.			
CUT BANK					
Kootenai (L. Cret.) Oil & Gas	886	Strat.	Depletion	(Kootenai formation includes Moulton, Sunburst, and Cut Bank sands.) Oil: 330' from legal subdivision line. 650' between wells in same formation 5-spot on 40-acre tract permitted. 75' topographic tolerance. (Order 10-54.) Gas: 330' from legal subdivision, 2400' between wells in same formation. 75' topographic tolerance. (Order 10-54.) Sections 20, 29, and 32 of Township 36 North, Range 4 West spaced 320-acres (N½ & S½.) (Order 26-70.)	There are 18 waterfloods in progress. Water from Eagle and Madison, or produced. Produced water disposed into Madison formation. (Orders 22-A-74, 55-A-77.), (60-A-80.), (91-A-80.), (Order 123-A-81.)
Madison (Miss.) Oil & Gas	39	Strat.	Water Drive		
(Shut-in)	8				
(Gas only) (Shut-in)	48				
Cut Bank (L. Cret.) Gas	178	Strat.	Depletion		
(Shut-in)	29				
Sunburst (L. Cret.) Gas	3	Strat.	Depletion		
(Shut-in)	2				
Moulton (L. Cret.) Gas	4	Strat.	Depletion		
(Shut-in)	2				
Bow Island (L. Cret.) Gas	3	Structural	Volumetric		
DAGMAR					
Red River (Ord.)	2	Structural	Water Drive	State-wide.	None
DAGMAR, NORTH					
Red River (Ord.)	1	Structural	Water Drive	320-acre spacing units; - well location no closer than 660' from unit boundary. (Order 6-81.)	Produced water injected into Dakota formation. (Order 124 A-81.)
DARLING (Included as part of Cut Bank Field)					
DEADMAN'S COULEE					
Nisku (Dev.)	4	Structural- Strat.	Water Drive		Produced water injected into Judith River formation. (Order 132-A-81.)
DEAN DOME					
Greybull (L. Cret.) Gas (Shut-in)	1	Structural	Water Drive	State-wide. Oil ring below gas cap.	None
Oil	4	Structural	Water Drive		
Produced water disposed into Dakota formation. (Order 42-A-80, 130-A-81.)					

Field, Formation, Age	No. Prod. Wells	Type of Trap	Probable Drive Mechanism	Spacing Regulations, Field Rules, and Remarks	Secondary or Water Disposal
DEER CREEK Interlake (Sil.)	1	Structural	Water Drive	80-acre spacing units consisting of any two adjacent quarter-quarter sections. Well location in NE¼ and SW¼ of each quarter section with 75' topographic tolerance. (Orders 23-55 & 14-59.) Commingling of production permitted upon approval of Board Petroleum Engineer. (Order 18-63.)	Excess produced water is disposed into Dakota and Lakota formations. (Orders 6-56 & 3-58.)
DELPHIA Amsden (Penn.)	2	Structural	Water Drive	State-wide.	None
DEVIL'S BASIN Heath (U. Miss.) (Shut-in)	7 3	Structural	Depletion	10-acre spacing units; well location to be in the center of each spacing unit with a 75' tolerance permitted for topographic or geologic reasons. (Order 114-80.)	None
DEVON Blackleaf (U. Cret.) Gas (Shut-in) Kootenai (L. Cret.) Oil Depleted	21	Strat. Strat.	Volumetric Depletion	State-wide. State-wide.	None None
DEVON, SOUTH Bow Island (L. Cret.) Gas (Shut-in)	1 10	Strat.	Volumetric	Drilled on state-wide spacing. Unitized for primary production. (Order 28-71, corrected.)	None
DIAMOND POINT Red River (Ord.)	1	Structural	Water Drive	320-acre spacing unit; allowing two wells to produce from the Red River or from commercial production at any depth shallower. (Order 20-80.)	None
DIVIDE Mission Canyon (Miss.)	5	Structural	Water Drive	State-wide.	Produced water disposed into Dakota formation. (Order 42-A-80, 130-A-81.)
DRY CREEK Eagle (U. Cret.) Gas Judith River (U. Cret.) (Shut-in) Frontier (U. Cret.) Gas (Shut-in) Greybull (L. Cret.) Gas Greybull (L. Cret.) Oil (Shut-in)	1 2 9 2 2 7 1	Structural- Strat. Structural Structural- Strat.	Volumetric Volumetric Volumetric- Depletion	State-wide. Field re-delineated. (Order 8-70.) Six additional gas storage wells, west end of structure.	None
DRY CREEK MIDDLE Frontier (U. Cret.) Gas Lakota (L. Cret.) Gas (Shut-in)	1 1	Structural- Strat.	Volumetric	320-acre spacing units consisting of two adjacent governmental quarter sections lying N-S or E-W at operator's option with permitted well no closer than 660' from spacing boundary. (Order 25-75.)	None
DRY CREEK, WEST Greybull (L. Cret.) Oil & Gas (Gas) (Shut-in)	1 1	Structural- Strat.	Volumetric Depletion	160-acre spacing units; well location anywhere in spacing unit but no closer than 660' from unit boundary. (Order 43-78.)	None
DRY CREEK (Shallow Gas) Judith River (U. Cret.) Eagle (U. Cret.) Virgelle (U. Cret.)	2 1 1	Structural Structural- Strat.	Volumetric Volumetric	160-acre spacing units; (all formations capable of producing gas from the top of the Cody to the surface). One well per horizon per spacing unit to be located no closer than 660' from unit boundary. (Order 54-76.)	None
DUNKIRK Sunburst (L. Cret.)	13			Only one well may produce from each producing zone, formation, or horizon, but no closer than 990' from section lines. (Order 58-81.) Field enlargement. (Order 104-81.)	

Field, Formation, Age	No. Prod. Wells	Type of Trap	Probable Drive Mechanism	Spacing Regulations, Field Rules, and Remarks	Secondary or Water Disposal
DUNKIRK, NORTH					
Bow Island (L. Cret.) Gas	9	Strat.	Water Drive	One well per governmental section per zone or horizon. Each producing well to be located anywhere within section but no closer than 990' feet from section line. (Order 25-77.) Field enlargement. (Order 64-78.) Field enlargement. (Order 157-81).	None
(Shut-in)	5				
DWYER					
Ratcliffe (Miss.)	10	Structural-	Water Drive-	160-acre spacing units; well location in center of SE 1/4 of spacing units with 175' topographic tolerance. (Orders 25-60, 29-61.)	Produced water disposed into Dakota formation. (Order 26-63.) Waterflood. (Order 20-68.)
(Shut-in)	5	Strat.	Volumetric		
DUGOUT CREEK					
Red River (Ord.)	1	Structural	Water Drive		
EAGLE					
Mission Canyon (Miss.)	17	Structural	Water-Drive	State-wide.	None
EAGLE SPRINGS					
Bow Island (L. Cret.) Gas	10	Structural	Depletion	One well per governmental section per zone, located anywhere but no closer than 990' from section line for all gas zones above the top of the Kootenai. (Order 4-78.) Commingling of Swift and Sunburst permissible (Order 19-79).	None
(Shut-in)	3				
EAST GLACIER					
Greenhorn (U. Cret)	1	Structural		State-wide. 160-acre spacing units. (Order 41-81.) Amended to enlarge field and designate 80-acre spacing units with permitted well to be located no closer than 330' to the exterior boundaries. (Order 112-81.)	None
ELK BASIN (Mont. Portion)					
Frontier (U. Cret.)	13	Structural	Gravity	State-wide spacing is waived within Unit Area. (Order 10-61.) Gas to Elk Basin gasoline plant.	Frontier: Water injection (Order 1-72.) Embar - Tensleep pressure maintenance by crestal gas injection. Waterflood approved in 1966. (Order 5-66.) Madison: Water Injection. (Order 17-61.)
(Shut-in)	6		Drainage		
Embar-Tensleep (Perm., Penn.)	15	Structural	Gravity		
(Shut-in)	10		Drainage		
Madison (Miss.)	26	Structural	Water Drive		
Big Horn (Ord.)	1				
ELK BASIN, NORTHWEST					
Frontier (U. Cret.)		Structural	Depletion	Spacing waived within unitized portion except that bottom of hole be no closer than 330' from unit boundary and there be at least 1320' surface distance between wells in same formation; 75' topographic tolerance. (Orders 43-63, 28-64.) Gas to Elk Basin gasoline plant.	Frontier: Waterflood in progress. Embar - Tensleep: Waterflood. (Order 3-67, 6-74.) Madison, produced water.
(Shut-in)	7				
Embar-Tensleep (Perm., Penn.)	4	Structural	Gravity		
O&G			Drainage		
Madison (Miss.)		Structural	Water Drive		
(Shut-in)	2				
ENID, NORTH					
Red River (Ord.)	1	Structural-	Water Drive	Spaced for one well field, NE 1/4 of Section 10 and NW 1/4 of Section 11, T-23N R-54E (Order 45-79.)	None
ETHRIDGE AREA					
Bow Island (L. Cret.) Gas	3	Strat.	Water Drive	State-wide, except two wells by (Order 28-65.)	None
Swift (U. Jur.) Gas	5	Strat.	Water Drive		
(Shut-in)	2				
ETHRIDGE, NORTH					
Swift (U. Jur.)	2	Strat.	Water Drive	320-acre spacing units; well location to be no closer than 660' from unit boundaries. Section 2-33N-4W is a 640-acre spacing unit. (Order 98-81.)	None
FAIRVIEW					
Winnipegosis (Dev.) Oil & Gas		Structural	Water Drive	160-acre spacing unit. Well location anywhere in spacing unit but no closer than 660' from unit boundary. (Orders 48-65, 1-67, 43-67, 44-67.) Gas to Fairview plant.	Northwest part of field unitized for gas injection. Gas from Fairview and Brorson fields. (Order 11-70.) Salt water disposal into Dakota. (Orders 9-A-71, 24-A-71.)
(Shut-in)	3				
Red River (Ord.) Oil & Gas	8	Structural	Water Drive		
(Shut-in)	3				
Mission Canyon (Miss.)	2	Structural	Water Drive		

Field, Formation, Age	No. Prod. Wells	Type of Trap	Probable Drive Mechanism	Spacing Regulations, Field Rules, and Remarks	Secondary or Water Disposal
FAIRVIEW, EAST Red River (Ord.)	1	Structural	Water Drive	320-acre spacing units; designated well in the North half of section 28 may be located no closer than 660' from the unit boundary or 1650' from any well producing from the same pool. (Order 76-81.)	None
FAIRVIEW, WEST Ratcliffe (Miss.)	1	Structural	Water Drive	State-wide.	None
FERTILE PRAIRIE Red River (Ord.)	2	Structural- Strat.	Water Drive	80-acre spacing units consisting of north-south rectangular units. Well location in NW¼ and SE¼ of quarter section with 75' topographic tolerance. (Orders 3-56, 7-62.) Board Orders (3-56 & 7-62) amended to provide well locations for each 80-acre spacing units to be the center of the SW or NE quarter quarter section of each quarter section with 75' tolerance for surface obstructions. (Order 65-80.)	None
FIDDLER CREEK Greybull (L. Cret.)	1	Structural Strat.	Depletion	State-wide.	None
FISHHOOK Red River (Ord.)	1	Structural	Water Drive	State-wide.	None
FITZPATRICK LAKE Bow Island (U. Cret.) Gas (Shut-in) Sunburst (L. Cret.) Gas	7 2 1	Strat.	Depletion	One well per governmental section located no closer than 990' from section line for all gas zones above the top of the Kootenai. (Order 31-79.)	None
FLAT COULEE Bow Island (L. Cret.) Gas (Shut-in) Dakota (L. Cret.) Gas Swift (Jur.) Gas Swift (Jur.) Oil Sawtooth (Jur.) Gas (Shut-in)	3 1 2 1 19 1 1	Structural Strat. Strat. Strat. Strat. Strat.	Depletion Depletion Depletion Depletion Depletion	330' from boundary of legal subdivision and 1320' from other wells in same reservoir. (Order 16-55.) State-wide, exception. (Order 11-66.) State-wide gas spacing. 40-acre spacing units. Well in center of spacing unit with 150' topographic tolerance. (Orders 16-62, 19-63.) State-wide.	Waterflood unit and redelineation approved for Swift sandstone. (Orders 13-71, 17-A-71, 22-71.)
FLAT COULEE, EAST Sawtooth (M. Jur.) (Shut-in)	1	Structural	Water Drive	State-wide.	None
FLAT LAKE Ratcliffe (Miss.) (Shut-in)	51 7	Structural Strat.	Partial Water Drive	160-acre spacing units; well location in center of NE¼ of quarter section with 200' topographic tolerance. Wells no closer than 961' to North Dakota state line and no closer than 1600' to Canadian line. (Orders 10-65, amended, 43-65, 23-66, 33-66.)	Excess salt water disposed into Muddy, Dakota, or Lakota formations (Orders 39-64, 39-66, 125-A-81.) and into Ratcliffe formation (Order 122-A-81.) Unit operation for eastern part of field. (Order 7-71.) Unit operation for western part of field. (Order 32-74.)
FLAT LAKE, SOUTH Ratcliffe (Miss.) (Shut-in)	6 1	Structural- Strat.	Partial Water Drive	160-acre spacing units established by (Order 2-67) then modified to provide that the permitted well may be located anywhere within the unit but no closer than 660' to any unit boundary. (Order 49-80.)	Excess salt water disposed into Muddy, Dakota, or Lakota. (Order 19-67.)
FORT CONRAD Bow Island (U. Cret.)	6	Structural-	Volumetric	640-acre spacing units; well location to be no closer than 990' from the section line. (Order 19-81.)	None

Field, Formation, Age	No. Prod. Wells	Type of Trap	Probable Drive Mechanism	Spacing Regulations, Field Rules, and Remarks	Secondary or Water Disposal
FORT GILBERT					
Red River (Ord.)	3	Structural	Depletion	160-acre spacing units; Well location no closer	Excess produced associated gas
Red River (Ord.) & Mission Canyon (Miss.)	5		and Water Drive	than 660' from unit boundary with 150' topo- graphic tolerance. (Order 94-81.)	reinjecting into Duperow formation. (Order 78-81.)
FOUR MILE CREEK					
Red River (Ord.)	1	Structural	Depletion	320-acre spacing units. (Order 43-75.)	None
FOUR MILE CREEK, WEST					
Red River (Ord.)	2	Structural	Depletion	State-wide.	None
FOX CREEK					
Mission Canyon (Miss.)	1	Structural	Depletion	State-wide.	None
FOX CREEK, NORTH					
Mission Canyon (Miss.) O&G	3	Structural	Depletion	State-wide.	None
FRANNIE (Mont. Portion)					
Tensleep (Penn.)	2	Structural	Comb. Water Drive and Gravity Drainage	10-acre spacing units; well location in center of each unit with 100' topographic tolerance. (Order 35-63.)	Unitized for waterflood of Phos- phoria-Tensleep formations using produced fluids. (Order 21-70.)
FRED & GEORGE CREEK					
Sunburst (L. Cret.) Oil & Gas	19	Strat.	Depletion	Oil: 40-acre spacing units; well location in center	Sunburst waterflood initiated July,
(Shut-in)	6			of unit with 250' topographic tolerance. (Orders	1970, using water from Madison,
Swift (U. Jur.) Oil & Gas	17	Strat.	Depletion	29-63, 1-65.) State-wide. Order 29-63 amended	(Order 13-70) and Eagle water.
(Shut-in)	10			by (Order 48-77.)	(Order 27-71.) (Order 40-80.)
Bow Island (L. Cret.) Gas	3	Structural	Depletion		
(Shut-in)					
FRESNO					
Eagle-Virgelle (U. Cret.) Gas	9	Structural- Strat.	Volumetric	640-acre spacing units, wells located no closer than 990' from unit boundary. One well may be drilled within each spacing unit for each produc- ing horizon within the spacing unit. (Order 14-76.) Field enlargement and modification of field rules within certain areas. (Order 52-80.)	None
FROG COULEE					
Red River (Ord.)	1	Structural	Water Drive	320-acre spacing units; wells to be located no closer than 660' from the unit boundary. (Order 55-79.)	None
FROID, SOUTH					
Red River (Ord.)	2	Structural Strat.	Depletion	State-wide.	None
GAGE					
Amsden (Penn.)	3	Structural	Water Drive	40-acre spacing units; well location to be in center of each unit with a permitted tolerance of 150' for topographic or geological reasons. (Order 120-80.) Field enlargement. (Order 44-81.)	None
GAS CITY					
Red River (Ord.)	11	Structural	Depletion-	80-acre spacing units consisting of E½ and W½	Excess produced water disposed
(Shut-in)	9		Water Drive	of quarter sections; well location in NW¼ and SE¼ of quarter section; 150' topographic toler- ance. Spacing waived and state-wide Rules for (Deviation), (Commingling), and (Dual Comple- tion) are waived in unitized portion of field. (Order 29-62.)	into Judith River formation. (Orders 32-61, 20-64.) Waterflood using produced water and Madison water. (Order 16-69.) Produced water disposal into Charles "B" formation. (Order 90-A-79.)

Field, Formation, Age	No. Prod Wells	Type of Trap	Probable Drive Mechanism	Spacing Regulations, Field Rules, and Remarks	Secondary or Water Disposal
GIRARD Red River (Ord.) (Shut-in)	1	Structural- Strat.	Depletion- Water Drive	State-wide.	None
GLENDIVE Red River (Ord.) Oil & Gas (Shut-in)	15 1	Structural- Strat.	Depletion- Water Drive	80-acre spacing units consisting of any two adjacent quarter-quarter sections; wells located in center of NE¼ and SW¼ of each quarter section with 75' topographic tolerance. (Orders 27-55, 19-62, 58-62, 20-66)	Excess produced water disposed into Swift, Dakota and Judith River formations. (Orders 16-56, 16-63, 40-A-70, 7-A-72.)
GOLD BUTTE Bow Island (L. Cret.) Gas	1	Structural	Water Drive	640-acre spacing, well location any quarter-quarter section cornering on center of section. (Order 26-59.) Amended field boundary. (Order 43-77.)	None
GOLDEN DOME Eagle (U. Cret.) Gas (Shut-in)	2	Structural- Strat.	Water Drive Depletion	160-acre spacing; 660' from spacing unit boundary. (Order 15-72.)	None
Greybull (L. Cret.) Oil	1			State-wide.	None
GOOSE LAKE Ratcliffe (Miss.) Oil & Gas (Shut-in)	34 4	Structural- Strat.	Partial Water Drive	Unitized. (Order 17-72.) Reduced field area; (Order 29-77.) Unit production curtailment; (Order 45-77.)	Excess produced water disposed into Mission Canyon and Dakota formations. (Orders 12-64, 14-66, 12-68.) Produced water disposed into Ratcliffe formation. (Order 138-A-80.) Produced water dispersed into Dakota formation. (Order 117-A-81.)
GOOSE LAKE, EAST Red River (Ord.)	1	Structural Strat.	Water Drive	320-acre spacing units. Well location no closer than 660' from unit boundary. (Order 20-81.)	None
GOSSETT Mission Canyon (Miss.)	1	Structural	Depletion	State-wide.	None
GORMAN COULEE Eagle-Clagget J.R. (U. Cret.) Gas (Shut-in)	6	Structural Strat.	Water Drive	State-wide.	None
GRABEN COULEE Swift, Cut Bank, Madison	68	Structural- Strat.	Depletion	40-acre spacing units; well location no closer than 330' from legal subdivision. (Cut Bank and Madison) Oil: 330' from boundary of legal subdivision and 650' from any other well in same reservoir and on same lease. 75' topographic tolerance. (Order 73-62.)	Excess produced water disposed into Cut Bank formation. (Order 45-A-75.)
GRANDVIEW Bow Island-Sunburst (L. Cret.) Gas (2 Zones) (Shut-in)	7 2	Structural	Unknown	320-acre spacing units aligned in a north-south direction; well location no closer than 660' to a spacing unit boundary. (Order 49-67.) Dual completion with Bow Island.	None
Madison (Miss.) Gas	3	Structural	Unknown		
GRANDVIEW, EAST Swift (Jur.) (Shut-in)	2 1	Structural	Water Drive	State-wide.	None
GRANDVIEW, WEST Bow Island (L. Cret.) Gas (Shut-in)	1	Structural	Unknown	State-wide.	None

Field, Formation, Age	No. Prod Wells	Type of Trap	Probable Drive Mechanism	Spacing Regulations, Field Rules, and Remarks	Secondary or Water Disposal
GREEN COULEE Red River (Ord.)	1	Structural	Water Drive	160-acre spacing units for Ratcliffe formation. Well location to be no closer than 660' to unit boundaries with 150' tolerance allowed for topographic or geologic reasons. 320-acre spacing units for the Red River formation with well location to be no closer than 660' to the unit boundary nor closer than 1650' from any well producing from the Red River. (Order 56-81.)	None
GUMBO RIDGE Tyler (L. Penn.) (Shut-in)	4 2	Structural- Strat.	Unknown	State-wide.	3rd Cat Creek water for waterflood (Order 54-79.)
GUNSIGHT Ratcliffe (Miss.)	1	Structural- Strat.	Water Drive	State-wide.	None
GYPSY BASIN Sawtooth, Sunburst, Swift, Madison	18	Structural- Strat.	Comb. Water Drive and Depletion	330' from lease lines and 660' between wells in same formation. Only two wells per quarter-quarter section. (Order 7-66.) Same as Sunburst.	Order 6-64 permits injection of excessive gas (produced with oil) into the Sunburst gas cap.
Sawtooth, Madison, Sunburst (Gas)	4			(Sawtooth-Madison) Oil: 40-acre spacing units; wells no closer than 330' from lease line. (Order 7-66.) (Sawtooth-Madison) Gas: 160-acre spacing units; well locations in center of any quarter-quarter section in each 160-acre unit, 2340' between gas wells. 150' topographic tolerance (Order 13-59.)	None
GYPSY, NORTH Sunburst (L. Cret.) Nisku (Dev.)	1 1	Structural Strat.	Water Drive & Depletion	Production of both oil & gas from all horizons allowed without restrictions except no well may be drilled closer than 330' from the exterior boundary of the field. (Order 11-80.)	None
HAMMOND (Gas) Muddy (L. Cret.) (Shut-in)	11	Strat.	Volumetric	320-acre spacing units; each unit shall consist of a regular half of a governmental section with well location to be no closer than 660' to a unit boundary nor closer than 990' to the exterior boundaries of the field. (Order 97-80.)	None
HARDIN Frontier (U. Cret.) Gas (Shut-in)	16 31	Strat.	Volumetric	State-wide.	Water disposal into Red River. (Order 20-A-70.)
HARDPAN Bow Island (L. Cret.) Swift (Jur.) (Shut-in)	1 1	Structural	Unknown	Spacing 1 well per section. Well location no closer than 990' from the section boundary. (Order 145-81.)	None
HARDSCRABBLE CREEK Red River (Ord.)	2	Structural	Water Drive	State-wide.	None
HAWK HAVEN Mission Canyon (Miss.)	1	Strat.	Water Drive		
HAY CREEK Mission Canyon (Miss.) (Shut-in)	2 1	Structural	Depletion	State-wide.	Produced water disposed into Dakota formation. (Orders 90-A- 80, 129-A-81.)
Red River (Ord.) (Shut-in)	1 1	Structural	Volumetric Water Drive	320-acre spacing, any two adjacent quarter sections, direction to be determined by operator. Location no closer than 660' from unit boundary. (Orders 15-69, 27-73.) Gas to Brorson plant.	

Field, Formation, Age	No. Prod. Wells	Type of Trap	Probable Drive Mechanism	Spacing Regulations, Field Rules, and Remarks	Secondary or Water Disposal
HAYSTACK BUTTE Eagle-Virg. (U. Cret.) Bow Island (L. Cret.) Kootenai (L. Cret.)	7 (Shut-in) 1	Structural- Strat.	Volumetric	640-acre spacing units; one well per each producing horizon above Kootenai. Location no closer than 990' from spacing unit boundary. (Order 85-76.) Amended field boundary. (Order 37-77.)	None
HIAWATHA Tyler (L. Penn.) (2 sands)	4	Structural- Strat.	Depletion	State-wide.	None
HIBBARD Amsden (Penn.)	1	Unknown	Water Drive	State-wide.	None
HIGH FIVE Tyler (Penn.) (Shut-in)	9 1	Structural- Strat.	Water Drive	State-wide.	Water disposed into Dakota and Stensvad formations (Orders 33-A-77, 70-A-78.) Unitized & Polymen-Waterflood authorized. (Order 110-80.)
HIGHVIEW Madison (Miss.) Oil & Gas (Shut-in)	4 2	Structural	Water Drive	160-acre spacing units, located no closer than 660' from spacing unit boundary. 150' topographic tolerance. (Order 84-76.)	None
HONKER Red River (Ord.)	1	Structural	Water Drive	320-acre specified spaing units; permitted well not to be closer than 660' from the unit boundary. (Order 105-80.)	None
HONKER-WINNIPEGOSIS Winnipegosis (Dev.)	1	Structural	Water Drive	Single spacing unit. (Order 81-81.)	None
HORSE CREEK Swift (U. Jur.) (Shut-in)	1 1	Structural	Water Drive	State-wide.	None
HOWARD COULEE Tyler (L. Penn.) (Shut-in)	1 2	Structural- Strat.	Unknown	State-wide.	Produced water injected into the Piper formation. (Order 69-A-78.)
INJUN CREEK Tyler Stensvad	1	Strat.	Depletion	State-wide.	None
INTAKE II Red River (Ord.)	1	Structural	Water Drive	320-acre spacing units; permitted well to be located no closer than 660' from the unit boundary. (Order 99-81.)	
IVANHOE DOME Amsden (L. Penn.) (Shut-in) Tyler (L. Penn.) (Shut-in) Morrison (U. Jur.) (Shut-in)	2 8 2 1	Structural- Strat. Structural- Strat.	Water Drive Depletion	40-acre spacing unit for production from any one common formation; well location in center of unit with 200' topographic tolerance. (Order 7-60 and 13-56.)	Waterflood of Tyler B & C sands discontinued. Water disposal into Tyler "A". (Order 8-A-78.)
JIM COULEE Tyler (L. Penn.) (Shut-in)	12 1	Structural Strat.	Depletion Water Drive	Unitized (Order 18-72.) No well closer than 330' from unit boundary.	Waterflood; produced and Third Cat Creek water.
JIM COULEE, NORTH Tyler (L. Penn.)	1	Strat.	Depletion Water Drive		

Field, Formation, Age	No. Prod Wells	Type of Trap	Probable Drive Mechanism	Spacing Regulations, Field Rules, and Remarks	Secondary or Water Disposal
KATY LAKE, NORTH					
Red River (Ord.)	6	Structural	Depletion,	State-wide.	None
Mission Canyon	1	Strat.	Water Drive		
KEG COULEE					
Tyler (Penn.) Oil & Gas	14	Strat.	Depletion	40-acre spacing in southwest portion of field except that spacing is waived in unitized portion. (Orders 3-64, 4-64, 23-64.) 80-acre spacing in remainder of field with variable pattern. (Orders 11-60, 28-62.) (40-acre spacing; W½ E½ and W½ Sec. 35-11N-30E; NW¼ Sec. 2-10N-30E). (Order 23-72.) Topographic tolerance varies from 100' to 250' (Orders 11-60, 4-64, 23-64.) Buffer zone waived. (Order 16-65.) Field Reduction (Order 2-76.) (Orders 11-60, 4-64, and 2-76) Amended by: (Orders 58-76.)	Three waterflood units. (Orders 3-64, 28-66, 10-69, 14-69.) Madison water injected.
(Shut-in)	7				
KEG COULEE, NORTH					
Tyler (Penn.)	3	Strat.	Depletion	40-acre spacing units; well location in center of spacing unit with 150' topographic tolerance. (Order 46-64.) Buffer zone waived. (Order 16-65.) Field Area amended (Order 59-76.)	None
KEITH & EAST KEITH					
2nd White Specks (U. Cret.) Gas	9	Structural	Water Drive	State-wide, except unitized portions spaced by (Order 22-62.) Pooling (Order 19-66.)	None
(Shut-in)	2				
Blackleaf (L. Cret.) Gas	12				
(Shut-in)	4				
Sawtooth (Jur.) Gas	5				
(Shut-in)	2				
KELLEY					
Tyler (Penn.)	3	Strat.	Depletion	State-wide. 250' topographic tolerance. (Order 15-67.)	Waterflood using Third Cat Creek water. (Orders 8-69, 51-76.)
KEVIN-SUNBURST					
Sunburst (L. Cret.) Oil	33	Strat.	Depletion	Oil: 9 wells per 40-acre tract; only 3 wells on any side of tract with set back at least 220' from line. (Orders 8-54, 28-55.)	There are four water floods in operation using Madison water. (Orders 9-64, 17-64, 30-64, 36-65, 29-71.) Sunburst water disposed into Madison (Order 50-76.)
Bow Island-Sunburst (L. Cret.)	24	Structure		Gas: Well to be no closer than 330' from the boundaries of any legal subdivision line, nor less than 2400' from every other drilling or produceable well on the same lease or unit. (Order 8-54.)	H2S, CO2, and produced water disposed into Madison. (Order 156-81.)
& Swift (U. Cret.) Gas		Structure-			
Madison (Miss.) Oil & Gas	677	Strat.	Depletion		
KEVIN-SUNBURST NISKU GAS					
Nisku (Dev.)	4	Structural	Volumetric	640-acre spacing units; location no closer than 990' from spacing unit boundary. (Order 83-76.)	None
KEVIN, SOUTHWEST					
Bow Island (L. Cret.) Gas	4	Structure-	Depletion	320-acre one-half section spacing units lying N-S or E-W at operator's option. Location to be no closer than 660' from unit boundary for Sunburst-Swift formations and all formations above the top of the Kootenai. (Orders 26-78, 47-78, 48-78.)	None
(Shut-in)	1	Strat.		Field enlargement. (Order 96-79.) and (Order 47-80.) Field enlargement. (Order 163-81.)	
Sunburst (L. Cret.) Gas	7				
Swift (U. Jur.) Gas	1				
Bow Island-Swift	1				
(Shut-in)	1				
Bow Island-Sunburst	2				
KICKING HORSE					
Bow Island (L. Cret.) Gas	9	Structural	Depletion	320-acre spacing with location permitted no closer than 660' from unit boundary and 990' from field boundary. (Order 17-74.) Board (Order 17-74) is amended to include certain additional lands into field and provide that 320-acre spacing units may be either the N/2 & S/2 or E/2 & W/2 of section. (Order 53-80.)	None
(Shut-in)	1				
Sawtooth (Jur.) Gas	1	Strat.	Depletion		
Sunburst (L. Cret.)	1	Strat.	Depletion		

Field, Formation, Age	No Prod. Wells	Type of Trap	Probable Drive Mechanism	Spacing Regulations, Field Rules, and Remarks	Secondary or Water Disposal
KINCHELOE RANCH, WEST Tyler (Penn.)	4	Strat.	Depletion	State-wide.	None
KINYON COULEE Bow Island (L. Cret.)	4	Structural Strat.	Volumetric	State-wide.	None
KINYON COULEE, SOUTH Bow Island (L. Cret.)	3	Structural	Volumetric	Only one well permitted. Well location no closer than 990' from section line. (Order 31-81.)	None
KRUG CREEK Red River (Ord.)	1	Structural	Water Drive	320-acre spacing units consisting of 2 contiguous quarter sections designated by operator. Well location no closer than 660' from unit boundary or 1650' from existing well. Production may be commingled with board approval. (Order 27-81.)	None
LAIRD CREEK Swift (U. Jur.) Oil & Gas	6	Strat.	Depletion	State-wide.	Unitized and waterflood authorized in Swift for oil production. (Order 25-74.) Commenced 2-25-77.
LAKE BASIN Telegraph Creek (U. Cret.) Gas Eagle-Virgelle (U. Cret.) Gas	23	Structural- Strat.	Volumetric	160-acre spacing units to base of Virgelle; wells no closer than 660' from unit boundary and 990' from field boundary. Commingling permitted after administrative approval. (Order 9-74.) Gas from Telegraph Creek pooled. (Order 29-75.)	None
LAKE BASIN, NORTH Eagle, Frontier (U. Cret.) Gas (Shut-in) Claggett (Shut-in) Eagle-Virg. (U. Cret.) Gas (Shut-in) Judith River (U. Cret.) Gas (Shut-in)	2 1 9 1 3 1 5 1	Structural Structural	Unknown Unknown	640-acre spacing units consisting of one section. Locations 990' from section line. (Order 3-74.) 160-acre spacing units located no closer than 660' from quarter section lines within restricted Sections. (Order 63-76.)	None None
LAKE FRANCIS Bow Island (L. Cret.) Gas	1	Structural	Volumetric	Statewide	None
LAKESIDE Eagle (U. Cret.)	1	Structural	Volumetric	State-wide.	None
LAMBERT Red River (Ord.)	2	Structural	Depletion Water Drive	State-wide.	None
LANDSLIDE BUTTE Sun River (Miss.)	1	Unknown	Water Drive	State-wide.	None
LAREDO Eagle (U. Cret.) (Shut-in) Judith River (U. Cret.) (Shut-in)	29 1	Structural Strat.	Depletion	320-acre spacing with unit consisting of one-half section lying N-S or E-W at operator's option after administrative approval. Well no closer than 990' from unit boundary. (Order 8-74.)	None
LARIAT Red River (Ord.)	1	Struc.	Water Drive	Single well spacing unit for Red River (Order 57-81.)	
LAUREL Dakota (L. Cret.) (Shut-in)	20			10-acre spacing unit. Well location to be in center of spacing unit with 75' topographic tolerance. (Order 15-62.)	Muddy Gas injection into the Dakota approved. (Order 85-79.)
LEARY Muddy (L. Cret.)	5	Structural- Strat.	Depletion	80-acre spacing with locations in NE 1/4 and SW 1/4 of each quarter section, 200' topographic tolerance. (Orders 12-69, 19-70.) Reduced Field Area (Order 68-76.)	None

Field, Formation, Age	No. Prod. Wells	Type of Trap	Probable Drive Mechanism	Spacing Regulations, Field Rules, and Remarks	Secondary or Water Disposal
LEDGER Bow Island (L. Cret.) Gas	38	Structural	Volumetric	640-acre spacing: one well per section per Sand to be located no closer than 990' from section line. Permissible to commingle two or more Sands, subject to administrative approval by the Petroleum Engineer. (Order 53-77.)	None
LEDGER, NO. Bow Island (L. Cret.) (Shut-in)	1	Structural	Volumetric	State-wide.	None
LEROY Judith River-Eagle	22	Unknown	Depletion	320-acre spacing with unit consisting of one-half section lying N-S or E-W at operator's option after administrative approval. Well no closer than 660' from unit boundary and 990' from field boundary. (Order 19-75.) Board (Order 19-75) amended that a tolerance of 330' for permitted well be allowed for topographic reasons. (Order 72-80.)	None
(Shut-in)	4				
Virgelle (U. Cret.) Gas (Shut-in)	8	Unknown	Depletion		
LISCOM CREEK Shannon (U. Cret.) Gas (Shut-in)	9 1	Structural- Strat.	Depletion	Spacing, one well per 640 acres, with location no closer than 990' from section boundary. (Order 20-72.)	None
LISK CREEK Red River (Ord.)	1	Structural	Water Drive	State-wide.	None
LITTLE BEAVER (Mont. Portion) Red River (Ord.)	25	Structural	Comb. Depletion and Water Drive	Spacing waived and General Rules for (Deviation), (Commingle), and (Dual Completion) are suspended until present Unit Agreement becomes inoperative. (Order 41-62.)	Waterflood of the Red River was commenced in August, 1967. (Order 3-66.) Minnelusa water.
LITTLE BEAVER, EAST (Mont. Portion) Red River (Ord.)	9			Same as for Little Beaver. (Order 42-62.)	Waterflood of the Red River was commenced in April, 1965. (Order 33-64.)
(Shut-in)	4	Structural	Comb. Depletion and Water Drive		
LITTLE CREEK Eagle-Virgelle (U. Cret.) Gas	7	Structural	Volumetric	State-wide.	None
LITTLE PHANTOM Sunburst	1	Strat.	Depletion	10-acre spacing units; Well location to be located anywhere within the spacing unit but no closer than 220' from the exterior boundary lines of the field nor closer than 440' to any well capable of or producing from the Sunburst Sands. (Order 46-81.)	
LITTLE ROCK Blackleaf (L. Cret.) Gas	14	Structural Strat.	Depletion	320-acre north half and south half spacing units. Well location no closer than 990' from west line of Section 14 and 660' from the remaining unit boundary lines. (Order 40-78.) Field enlargement. (Order 94-79.) and (Order 34-80.)	None
LITTLE WALL CREEK Tyler (Penn.)	24	Strat.	Depletion Water Drive	State-wide.	Produced water injected into Tyler formation (Orders 54-A-77, 63-A-78, Order 1-A-81.)
LODGE GRASS Tensleep (Penn.)	1	Structural- Strat.	Water Drive	State-wide.	None
LOHMAN Eagle (U. Cret.)	4	Unknown	Depletion	640-acre spacing; one well per section to be located no closer than 990' from section line. (Order 23-78.)	None
(Shut-in)	1				

Field, Formation, Age	No. Prod Wells	Type of Trap	Probable Drive Mechanism	Spacing Regulations, Field Rules, and Remarks	Secondary or Water Disposal
LONE BUTTE Red River (Ord.)	1	Structural	Unknown	320-acre spacing units with well location at least 660' from unit boundary. Not delineated.	None
LONETREE CREEK Red River (Ord.)	9	Structural	Depletion	320-acre spacing, wells 660' from spacing boundary, 2000' between wells. (Order 29-72.) Field reduction (Order 162-81.)	None
LONG CREEK Madison (Miss.) Charles	1	Structural	Water Drive	State-wide spacing.	None
LONG CREEK, WEST Nisku (Dev.)	2	Structural	Water Drive	80-acre spacing units comprised of two contiguous quarter quarter sections which may lie in either one or two governmental sections aligned either North-South, East-West with location to be no closer than 330 feet from unit boundary nor less than 1000 feet from any other producing well. (Order 27-77.)	None
LOOKOUT BUTTE (Includes Coral Creek Unit) Madison (Miss.)	2	Structural	Water Drive	State-wide spacing.	Water disposal into Madison. (Order 68-62.)
(Shut-in)	5				
Interlake, Red River (Sil.-Ord.)	27	Structural	Comb.	160-acre spacing; well location in center of SE 1/4 of each quarter section with 150' topographic tolerance. (Order 21-62.) Coral Creek Unit not subject to spacing rules. Redelineated per (Order 7-63.)	Waterflood of Silurian-Ordovician approved in 1966. (Order 35-66.)
(Shut-in)	6		Depletion and Water Drive		Water from Minnelusa.
LOWELL Red River (Ord.)	3	Structural	Water Drive	320-acre spacing units consisting of two contiguous governmental quarter sections which may lie in either one or two governmental sections. Wells to be located no closer than 660' from unit boundary or closer than 1650' to well producing from the same horizon. (Order 104-79.)	None
MACKAY DOME Greybull (L. Cret.) Oil	4	Structural	Water Drive	State-wide.	None
MARIAS RIVER Bow Island (L. Cret.)	15	Structural	Depletion	One well per section per horizon above the top of the Kootenai. Location to be no closer than 990' from section line. (Order 18-78.)	None
MASON LAKE Lakota (L. Cret.)	13	Structural	Water Drive	80-acre spacing units consisting of 1/2 of a quarter section lying in either E-W or N-S direction; well location in center of the NE and SW quarter-quarter sections of each quarter section with 75' topographic tolerance. (Order 35-78.) Amending (Order 35-78) for certain lots designated as spacing units. (Order 66-78.) Field enlargement (Order 16-79.)	Produced water disposed into Muddy formation. (Order 3-A-80.)
MASON LAKE, NORTH Amsden (Penn.)	1	Structural	Water Drive	State-wide.	None
McCABE Ratcliffe (Miss.)	2	Structural-	Depletion	160-acre spacing units; permitted well to be no closer than 660' from spacing unit boundary. (Order 100-80.) 150' tolerance allowed for topographic reasons. (Order 3-81.) Board Order No. 100-80 amended to eliminate the requirement of 1650' between wells producing from the Madison Group. (Order 37-81.)	None

Field, Formation, Age	No Prod. Wells	Type of Trap	Probable Drive Mechanism	Spacing Regulations, Field Rules, and Remarks	Secondary or Water Disposal
MEDICINE LAKE					
Red River (Ord.)	10	Structural	Water Drive	320-acre spacing units to comprise of any two contiguous governmental quarter sections in either one or two governmental sections. Well to be located no closer than 660' from unit boundary nor closer than 1650' to any well producing from the same formation (Order 50-79.)	Produced water disposed into Kibby & Dakota formation. (Order 133-A-81.)
(Shut-in)	1				
Winnipegosis (Dev.)	1	Structural	Comb.		
Winnipegosis-Interlake (Dev.-Sil.)	1	Structural	Depletion and Water Drive		
Ratcliffe-Midale (Miss.)	1	Structural	Water Drive		
MELSTONE					
Tyler (Penn.)	12	Structural- Strat.	Depletion	State-wide.	None
MIDBY					
Red River (Ord.)	1	Structural	Water Drive	160-acre spacing units; Well location to be no closer than 660' from unit boundary and spacing units designated by: (Order 24-81.)	
MIDDLE BUTTE					
Bow Island (Cret.) Gas	5	Structural	Volumetric	Orders (3-60, 21-75) Amended to delineated field extension and 320-acre spacing units consisting of the E½ & W½ of each section; well location no closer than 990' from the section line and 660' from the interior boundary. (Order 47-77.)	None
(Shut-in)	1				
MINERAL BENCH					
Charles (Miss.)	1	Structural	Water Drive	State-wide.	Water disposal into Dakota-Lakota per (Order 18-65.)
MINERS COULEE					
Sunburst (L. Cret.) Oil	3	Strat.	Depletion	Oil: 40-acre units consisting of quarter-quarter sections; well location no closer than 330' from lease or property line and 660' from any other well (Order 9-66.) Order 9-66 amended to comply with Order 5-74.	None
(Shut-in)	3				
Swift (U. Jur.) Oil	1	Strat. Strat.?	Depletion Water Drive	Gas: 160-acre spacing with wells 990' from unit boundary. (Order 5-74.)	
(Shut-in)	1				
Sunburst-Swift Gas	2			Sawtooth gas spacing unit. (Order 43-76.) Field redelineation (Order 44-77.) Field enlargement. (Order 4-80.)	
(Shut-in)	1				
Sawtooth (M. Jur.) Gas	1	Strat.	Depletion		
Bow Island (L. Cret.) Gas	18				
(Shut-in)	1				
MDNARCH					
Mission Canyon (Miss.)	2	Structural- Strat.	Water Drive	80-acre spacing units consisting of east and west half of quarter section. Well location in SW¼ and NE¼ of quarter section. Location within 660' square at center of quarter section. (Order 18-61.)	Produced water is disposed into the salt water disposal system for the Pennel Field.
Interlake, Red River (Sil.-Ord.)	12	Structural- Strat.		160-acre spacing units consisting of a quarter section; well location in center of SW¼ of each quarter section with 175' topographic tolerance. (Orders 12-59, 4-63.)	Waterflood initiated 12-1-73. (Order 23-73.)
(Shut-in)	3				
MDN DAK WEST					
Madison (Miss.)	Total-	Structural	Water Drive	320-acre spacing units for Silurian and Ordovician pools. Units to consist of either (N½, S½, E½ or W½) well location to be no closer than 660' to unit boundary or closer than 1650' to any well drilling or producing from same pool. (Order 42-77.)	Produced water injected into Dakota-Lakota. (Order 49-A-78.), & (111-A-80.)
Dawson Bay (Dev.)	26				
(Shut-in)	2				
Winnipegosis (Dev.)	1	Structural	Comb.		
Interlake (Sil.)			Depletion and		
Stony Mtn. (Ord.)	8		Water Drive	320-acre spacing units for Madison and Devonian formations. Units to consist of either (N½, S½, E½ or W½) well location to be no closer than 660' from a quarter section line or section line and no closer than 1650' to any well drilling or producing from same pool. (Orders 23-77, 33-78, 51-79.)	
Red River (Ord.)					
MOSBY					
(See Cat Creek)					
MOSSER DOME					
Greybull (L. Cret.)	13	Structural	Water Drive	Spacing waived. Future development requires administrative approval of the Board. (Order 27-62.)	None

Field, Formation, Age	No Prod Wells	Type of Trap	Probable Drive Mechanism	Spacing Regulations, Field Rules, and Remarks	Secondary or Water Disposal
MT. LILLY					
Madison (Miss.) Gas	2	Structural-	Water Drive	640-acre spacing, well location in approximate	None
Sunburst (L. Cret.) Gas	1	Strat.	Depletion	center of any of the four quarter-quarter sections adjoining center of section; 250' topographic tolerance. (Order 37-63.)	
MUD CREEK					
Amsden (L. Penn.) (Shut-in)	2	Structural	Water Drive	640-acre spacing unit. Well location anywhere in 160-acre tract in center of each 640-acre well spacing unit. (Order 9-63.)	None
MUSTANG					
Red River (Ord.)	3	Structural	Water Drive	State-wide.	None
NOHLY					
Red River (Ord.)	2	Structural	Volumetric Water Drive	State-wide.	None
NORTH FORK					
Red River (Ord.)	1	Structural	Water Drive	State-wide.	None
Mission Canyon (Miss.)	1	Structural	Water Drive		
NORTH GILDFORD					
Sawtooth (M. Jur.) (Shut-in)	1	Structural	Unknown	320-acre specified spacing units. One well per unit 660' from boundary, 2640' between wells. (Order 9-58.) Boundary reduction. (Order 38-76.) Field enlargement (Order 9-79.)	None
O'BRIENS COULEE					
Bow Island (L. Cret.)	9	Structural	Volumetric	State-wide.	None
(Shut-in)	8				
OLLIE					
Red River (Ord.)	1	Structural	Water Drive	320-acre specified spacing units for the Red River and Duperow Formations. The permitted well for each spacing unit to be located no closer than 660' from the spacing unit boundary. (Order 73-80.)	None
Duperow (Dev.)	1				
OTIS CREEK					
Red River (Ord.)	3	Structural	Water Drive	320-acre spacing units; well to be located no closer than 660' to unit boundary. (Order 39-72.) Extended field boundary. (Orders 56-76, 67-76.)	
OTIS CREEK, SOUTH					
Red River (Ord.)	1	Structural	Depletion	Orders 39-72 and 56-76 amended to eliminate spacing units. New spacing units are qtr. sec- tions. Well locatin no closer than 660' from unit boundary or 1650' from producing well with 150' tolerance. Operator may designate contiguous qtr. sections as spacing units. (Order 73-81.)	None
OTTER CREEK					
Red River (Ord.)	1	Structural	Water Drive	State-wide.	None
OUTLOOK					
Duperow (Dev.)	1	Structural-	Water Drive	State-wide.	Produced water is disposed into Dakota and Siluro-Devonian forma- tions. (Orders 16-59, 17-65, 36-66, 9-A-77.) Produced water disposed into Madison formation. (Order 59-A-78.)
Winnipegosis (Dev.)	2	Structural-	Water Drive	State-wide.	
(Shut-in)	1	Strat.			
Silurian-Devonian	3	Structural-	Water Drive	160-acre spacing units; well location in center of either SW¼ or NE¼ of each quarter section; 175' topographic tolerance. (Order 19-59A.)	
(Shut-in)	1	Strat.			
OUTLOOK, SOUTH					
Winnipegosis (Dev.)	1	Structural	Water Drive	160-acre spacing; permitted wells in either SW¼ or NE¼ of quarter section; 175' topographic tolerance. (Order 19-59A.) Commingling permit- ted. (Order 45-64.)	Produced water disposed into Muddy and Dakota formations.

Field, Formation, Age	No. Prod Wells	Type of Trap	Probable Drive Mechanism	Spacing Regulations, Field Rules, and Remarks	Secondary or Water Disposal
OUTLOOK WEST Winnipegosis (Dev.)	2	Structural	Water Drive	160-acre spacing units consisting of quarter sections; permitted wells in either SW¼ or NE¼ with a tolerance of 175'. (Order 7-67.)	Produced water disposed into Dakota formation. (Order 42-66.)
OXBOW Red River (Ord.)	1	Structural-Strat.	Water Drive	320-acre spacing consisting of two contiguous governmental quarter sections which may be in one or two governmental sections lying E-W or N-S at operator's option. Location to be no closer than 660' to the unit boundary or closer than 1650' to a well producing from same pool. (Order 7-78.) Field enlargement. (Order 137-80.)	None
PALOMINO Nisku (Dev.) Mission Canyon	1	Structural-	Water Drive	State-wide.	None
PELICAN Red River (Ord.)	1	Structural	Water Drive	320-acre spacing units; wells to be located no closer than 660' to any governmental section or quarter section line boundary. (Order 21-79.)	None
PENNEL Siluro-Ordovician Oil & Gas (Shut-in)	97 11	Structural	Depletion- Water Drive	80-acre spacing units consisting of east and west half of quarter section; wells located in center of SE¼ and NW¼ of quarter sections with 150' topographic tolerance. (Order 15-61.) 80-acre spacing units on west side and 160-acre spacing units on east side of pool. Wells to be located in SE¼ and NW¼ of each quarter section (80 acres) and in SE¼ of each quarter section on 160-acre spacing. (Orders 1-56, 8-56, 15-61, 20-62, 4-63, 7-63.) Commingling approved. (Order 59-62.)	Produced water is being injected into Dakota, Siluro-Ordovician and Madison formations. (Orders 16-60, 46-62, 68-62, 36-63, 13-64.) Waterflood for Siluro-Ordovician approved Nov. 1968. (Order 24-68.)
PETE CREEK Sunburst (L. Cret.) Oil (Shut-in)	1 1	Strat.	Depletion	State-wide.	None
PHANTOM Sunburst (Cret.) Gas Sunburst (L. Cret.) Oil (Shut-in) Swift (U. Jur.) Gas	1 2 1 2	Structural Strat. Strat.	Depletion Depletion Depletion	*Gas: wells permitted anywhere within the unit but no closer than 990' to the unit boundary. *Oil: projected depths greater than 6000' to be located no closer than 660' to the unit boundary. Project depths less than 6000' to be located no closer than 330' to the unit boundary. (Order 48-77.)	None
PHANTOM, WEST Sunburst (L. Cret.) Gas	1	Structural	Depletion	One well per spacing unit to be located no closer than 660' to the exterior boundaries of three certain spacing units. (Order 65-78.)	None
PINE Mission Canyon (Miss.) Oil & Gas (Shut-in) Siluro-Ordovician Oil & Gas (Shut-in)	2 2 80 25	Structural Structural	Water Drive Depletion- Water Drive	Spacing and General Rules 213, 218 and 219 are waived within the Pine Unit. 80-acre spacing units outside of unit area; well location in NW¼ and SE¼ of quarter section; 150' topographic tolerance. (Order 37-62) Gas through extraction plant.	A waterflood program for the south area was started in 1959. A waterflood of the north area was approved in 1967. (Orders 13-68, 1-60, 8-62, 32-67.) Produced water injected into Mission Canyon. (Order 10-A-74.)
PLEVNA Judith River (U. Cret.) Gas (Shut-in) Eagle (U. Cret.) Gas (Shut-in)	19 5 1	Structural	Water Drive	1200' from quarter section line; 2400' from other wells in same lease or unit; 75' topographic tolerance. (Orders 34-54, 4-57,) and Order 34-54 Corrected.)	None

Field. Formation. Age	No. Prod. Wells	Type of Trap	Probable Drive Mechanism	Spacing Regulations. Field Rules. and Remarks	Secondary or Water Disposal
POLICE COULEE Bow Island (L. Cret.)	8	Structural	Depletion	320-acre spacing units; location no closer than 990' from section line and 660' from half section lines. Spacing units to consist of north half or south half, east half or west half at discretion of operator. (Order 53-76.) Extended Field boundaries. (Order 24-77.) Field enlargements. (Orders 20-79 and Order 46-79.)	None
PONDERA Sun River (Miss.) Oil & Gas (Shut-in)	298 21	Structural- Strat.	Depletion- Water Drive	Oil: 220' from legal subdivision, 430' from other wells in same reservoir on same lease; 75' topographic tolerance. Porter Bench Extension: 330' from legal subdivision line; 650' from other wells in same reservoir on same lease or unit; 75' topographic tolerance. (Order 9-54.) Gas: well to be located no closer than 1320' from the boundaries of any quarter section line, nor less than 3700' from every other drilling or produceable well on the same lease or unit. (Order 9-54 Corrected.)	Produced water injected into lower Madison. (Orders 11-56, 15-56, 4-65, 4-66, 20-A-71), (57-A-78), (58-A-78), (62-A-78), (71-A-78), (29-A-79), (62-A-79), (63-A-79), (64-A-79), (65-A-79), (14-A-80), (15-A-80), (16-A-80), (17-A-80), (127-A-81.)
PONDERA COULEE Sun River (Miss.) (Shut-in)	2 2	Structural	Water Drive	330' from legal subdivision lines or upon a 10-acre spacing pattern; 75' topographic tolerance. (Order 5-62.)	None
POPLAR, EAST Madison (Miss.) (Charles & Mission Canyon fms.) (Shut-in)	48 38	Structural	Water Drive	State-wide spacing; field delineated by (Order 7-55.) Re-delineation of field (Order 25-76.)	Unitized in 1955. (Order 7-55.) Excess produced water has been injected into the Dakota, Judith River, and Mission Canyon formations. (Orders No. 1-55, 5-57, 7-57, 14-61, 21-61, 34-61, 10-62, 51-67, 10-A-73, 127-A-80, and 121-A-81.)
Heath (Tyler) (Penn.)	1	Structural- Strat.	Water Drive		
Nisku (Dev.)	1	Structural	Water Drive		
POPLAR NORTHWEST Charles (Miss.) (''B'' & ''C'' or McGowan Zone)	14	Structural	Water Drive	80-acre spacing units consisting of E/2 and W/2 of each quarter section; permitted wells to be located in the center of NW 1/4 or SE 1/4 of each quarter section with 75' tolerance allowed in any direction for surface hazards and obstructions. (Order 18-55) 80-acre specifically designated spacing units with well location to be located in the center of the NW 1/4 or SE 1/4 of each quarter section with a tolerance of 150' in any direction for topographic or geologic reasons. (Order 26-76.) 80-acre spacing units to be N/2 and S/2 or E/2 and W/2 of each quarter section; permitted well to be located in center of each NE 1/4 or SW 1/4 of each quarter section with 150' tolerance for topographic or geologic reasons. (Order 124-80.) 80-Acre spacing units for test wells to the Charles formation; spacing units to be N/2 and S/2 or E/2 and W/2 of each quarter section with location to be in center of each NE or SW 1/4 of each quarter section with 150' tolerance for archeological reasons only. (Order 161-81.)	Produced water disposed into Dakota. (Order 61-A-78.)
PRAIRIE DELL Bow Island (L. Cret.) Sunburst (L. Cret.) Swift (U. Jur.)	41	Structural- Strat.	Depletion	320-acre spacing units with well location no closer than 660' to spacing unit boundary. (Order 10-76.) Redelineation and amendment to (Order 10-76.) Field enlargement by: (Orders 28-78, 24-79, 132-80, 40-81, 54-81, and 142-81.)	None

Field, Formation, Age	No. Prod. Wells	Type of Trap	Probable Drive Mechanism	Spacing Regulations, Field Rules, and Remarks	Secondary or Water Disposal
PRAIRE DELL, WEST Swift (U. Cret.) Gas	1	Structural- Strat.	Depletion	640-acre spacing unit; well to be no closer than 990' to the spacing unit boundary. (Order 16-78) Amending (Order 16-78) to include all horizons above the Rierdon formation. (Order 54-78.) Field enlargement. (Order 55-78.)	None
PRAIRIE ELK Charles "C" (Miss.)	1	Unknown	Water Drive	State-wide.	None
PRICHARD CREEK Sunburst (L. Cret.) Oil & Gas (Shut-in)	4	Strat.	Depletion	Well locations subject to administrative approval.	None. Unitized as to Sunburst for water injection. (Order 7-73.)
Swift (U. Jur.) Oil	2 1	Strat.	Depletion		
PUMPKIN CREEK Shannon (U. Cret.) Gas (Shut-in)	8	Strat. Strat.	Depletion	State-wide. Delineated (Order 10-71.)	None
PUTNAM Interlake (Sil.)	1	Structural	Volumetric Water Drive	State-wide.	None. Gas to McCulloch Gas Processing Corp. Brorson Plant.
Red River (Ord.)	10	Structural	Volumetric Water Drive		
Mission Canyon (Miss.)	3				
RABBIT HILLS Sawtooth (Jur.)	5	Structural Strat.	Volumetric Water Drive	160-acre spacing unit. Well location 660' from spacing unit boundary. (Orders 17-73, 34-74, 33-76.) Re-delineation (Order 47-76.)	Produced water disposed into Eagle formation. (Order 49-A-75.)
RAGGED POINT Tyler (Penn.) (Shut-in)	18 3	Strat.	Depletion	40-acre spacing units; 75' topographic tolerance. (Order 8-59.) Spacing waived for Tyler "A" sand reservoir within Tyler "A" Sand Unit except no well can be closer than 660' to Unit Boundary. (Order 35-65.)	A waterflood project of the Tyler "A" sand was commenced in February, 1966, using Third Cat Creek water. (Order 35-65.)
RAPELJE Claggett, Eagle, Judith River, Virgelle (U. Cret.)	15 1	Structural- Strat.	Water Drive	160-acre spacing. Wells no closer than 990' to unit boundary. Commingling after administrative approval. (Order 29-73.)	None
RATTLER BUTTE Tyler (Penn.)	3	Strat.	Depletion	State-wide.	None
RATTLESNAKE CDULEE Sunburst (L. Cret.) Oil & Gas Bow Island (L. Cret.) Gas (Shut-in)	2 1	Strat.	Depletion	State-wide.	None
RAYMOND Nisku (Dev.) Red River (Ord.) Winnipegosis (Dev.) Charles (Miss.)	2 2 1 10	Structural- Strat.	Depletion Water Drive	320-acre spacing units. Wells 660' from spacing unit boundary. (Order 38-72.) Gas Storage. (Order 50-78.) Field extension-new pool designation (Order 35-79.) (Order 50-78.) amended by (Order 60-79.) Field enlargement. (Order 31-80) and (Order 128-80.) Field reduction. (Order 135-81.)	Produced water injected into Dakota formation. (Order 38-A-74.) Produced water injected into Mission Canyon (Order 105-A-79) and (113-A-80.) Produced water injected into Raymond formation. (Order 131-A-81.) Authorization to inject gas into the Nisku formation. (Order 135-81.)
RAYMOND, NORTHEAST Nisku (Dev.)	1	Structural- Strat.	Depletion Water Drive	160-acre spacing units. Wells 660' from spacing unit boundary. (Order 12-74.)	None

Field, Formation, Age	No. Prod. Wells	Type of Trap	Probable Drive Mechanism	Spacing Regulations, Field Rules, and Remarks	Secondary or Water Disposal
REAGAN					
Sun River (Miss.) Oil	61	Structural	Gas Cap- Water Drive	State-wide. (Order 17-54.)	A pressure maintenance project utilizing gas injection was started in 1961. (Order 21-60.) Waterflood. (Order 27-72.)
Gas	1				
RED BANK					
Red River (Ord.)	2	Structural	Water Drive	State-wide.	None
Ratcliffe (Miss.)	10	Strat.			
RED CREEK					
Cut Bank (L. Cret.) Oil & Gas	7	Strat.	Depletion	40-acre spacing units; wells in center of spacing unit with 75' topographic or obstruction tolerance; spacing and field rules waived for unitized portion. (Orders 16-58, 73-62, 31-64, 5-70.)	Excess produced water injected into Bow Island and Madison. (Orders 22-63, 37-64.) A waterflood project in the Cut Bank sand was initiated in June, 1965, using Madison water.
(Shut-in)	2				
Sun River (Miss.) Oil & Gas	12	Structural	Water Drive		
(Shut-in)	6				
RED FOX					
Nisku (Dev.)	1	Structural	Water Drive	Field consists of one 160-acre spacing unit which straddles the section line. (Order 20-67.)	None
RED ROCK					
Eagle (U. Cret.) Gas	4	Structural- Strat.	Volumetric	Spacing units shall consist of the north half and south half of section with permitted well to be no closer than 990' from exterior section line nor closer than 660' to half section line. (Order 89-79.)	None
REDSTONE					
Winnipegosis (Dev.)	1	Unknown	Water Drive	One well per 160-acre unit, but no closer than 660' from unit boundary.	None
RED WATER					
Duperow (Dev.)	1	Structural- Strat.	Water Drive	State-wide.	None
REFUGE					
Red River (Ord.)	1	Structural	Water Drive	State-wide.	None
REPEAT					
Red River (Ord.)	1	Unknown	Water Drive	State-wide.	None
RESERVE					
Interlake (Silr.)	1	Structural- Strat.	Water Drive	160-acre spacing units; permitted well within 1320' square in center of quarter section. Commingling of Red River and Interlake, production permitted on individual well basis. (Orders 34-66, 27-67.)	Excess water injected into Dakota sand. (Order 23-A-67.)
Red River (Ord.)	4	Structural- Strat.	Water Drive		
(Shut-in)	1				
Winnipegosis (Dev.)					
RICHEY					
Charles (Miss.)	3	Structural	Water Drive	State-wide. Original 80-acre spacing revoked. (Order 11-73.)	None
RICHEY, SOUTHWEST					
Interlake, Dawson Bay	4	Structural	Depletion	160-acre spacing units; wells no closer than 900' from boundary or spacing unit (Order 25-62.)	A waterflood project in the Interlake and Dawson Bay was started in 1965. (Order 34-65.)
(Sil.) (Dev.) (Shut-in)	2				
RICHEY, WEST					
Charles (Miss.)	1	Structural	Water Drive	State-wide.	None
RIDGELAWN					
Madison (Miss.)	4	Structural	Water Drive	State-wide.	None
Red River	4				
RIPRAP COULEE					
Ratcliffe (Miss.)	5	Structural- Strat.	Depletion	State-wide.	None

Field, Formation, Age	No. Prod. Wells	Type of Trap	Probable Drive Mechanism	Spacing Regulations, Field Rules, and Remarks	Secondary or Water Disposal
ROCKY BOY					
Eagle-Virgelle (U. Cret.)	7	Structural- Strat.	Water Drive	State-wide.	None
(Shut-in)	3				
Judith River (U. Cret.)	3				
ROCKY POINT					
Red River (Ord.)	1	Structural	Volumetric Water Drive	320-acre spacing unit well to be located no closer than 660' from exterior boundary (Order 22-79.)	None
ROSCOE DOME					
Lakota (L. Cret.)	3	Structural	Water Drive	State-wide.	None
ROSEBUD					
Tyler (L. Penn.)	5	Structural- Strat.	Unknown	State-wide.	None
ROUGH RIDGE					
Eagle (U. Cret.)	(Shut-in) 1	Structural	Volumetric	State-wide.	None
ROYALS					
Dawson Bay (Dev.)	1	Structural	Depletion	State-wide.	None
RUDYARD					
Sawtooth (M. Jur.) Gas	7	Structural	Volumetric	640-acre spacing units consisting of one section; well location in center of NW 1/4 of section with 75' topographic tolerance. (Order 2-58.) Field boundaries reduced. (Order 39-76.)	None
Oil	2				
RUNAWAY					
Madison (Miss.)	1	Structural	Water Drive	State-wide.	None
RUSH MOUNTAIN					
Red River (Ord.)	1	Structural	Volumetric- Water Drive	State-wide. Dual zone completion in discovery well.	Excess water injected into Dakota sand. (Order 5-A-71.)
SAGE CREEK					
Greenhorn (Cret.) Gas	(Shut-in) 1	Strat.	Depletion	640-acre spacing, one producing well per section per formation above the Kootenai to be located no closer than 990' from section line. (Order 38-77.) Amended field boundary (Order 86-79.) Field enlargement (Order 33-81.)	None
Blackleaf (L. Cret.) Gas	16				
(Shut-in)	2				
SALT LAKE					
Bakken-Nisku (Miss.-Dev.)	4	Structural	Water Drive	State-wide.	Produced water disposed into Nesson (Madison) formation. (Order 61-A-80.)
SAND CREEK					
Interlake, Red River	4	Structural	Water Drive	80-acre spacing units consisting of any two adjacent quarter-quarter sections. Wells located in center of NW 1/4 and SE 1/4 of each quarter section. (Order 16-59.) Commingling of production from Interlake and Red River authorized per (Order 49-62.)	Excess produced water is injected into the Swift formation. (Order 9-61.)
(Sil.) (Ord.)	3				
(Shut-in)					
SANDWICH					
Sunburst (L. Cret.) Gas	1	Strat.	Depletion	320-acre spacing unit. Well: located no closer than 990' to spacing unit boundaries. (Order 17-77.)	None
Swift (U. Jur.) Gas	1				
(Shut-in)					
SAWTOOTH MOUNTAIN					
Judith River (U. Cret.)	8	Structural- Strat.	Volumetric Water Drive	640-acre spacing units, one well per section per formation, location to be not less than 990' from governmental section line. (Order 45-76.)	None
Eagle (U. Cret.)	24				
(Shut-in)	4				
SCOBAY					
Madison (Miss.)	1	Structural	Water Drive	State-wide.	None

Field, Formation, Age	No. Prod. Wells	Type of Trap	Probable Drive Mechanism	Spacing Regulations, Field Rules, and Remarks	Secondary or Water Disposal
SECOND CREEK					
Red River (Ord.)	4	Structural	Volumetric Water Drive	303.1-acre spacing unit; one well field. (Order 34-78.)	None
SECOND CREEK-DUPEROW					
Duperow (Dev.)	1	Structural	Water Drive	160-acre spacing units; well locations for each unit to be as specified by (Order 119-80.)	
SHEEPHERDER					
Tyler (L. Penn.)	3	Structural- Strat.	Unknown	State-wide.	None
SHELBY AREA					
Sunburst (L. Cret.) Gas	33	Structural- Strat.	Depletion	State-wide. Field outline not delineated. A few small Swift sand wells commingled with Sunburst.	None
(Shut-in)	17				
Bow Island (L. Cret.) Gas	5				
SHELBY, OLD					
Sunburst (L. Cret.) Gas	1			320-acre spacing units to be comprised of either E/2, W/2, N/2, or S/2 of a section for Sunburst gas. Well location to be no closer than 660' to the unit boundary. (Order 85-81.) Field enlargement (Order 114-8 and 159-81.)	
(Shut-in)	8				
SHERARD					
Eagle (U. Cret.) Gas	29	Structural- Strat.	Volumetric Water Drive	640-acre spacing units; 990' from section line. (Order 1-74.) 160-acre spacing units; (Eagle) 990' from section line, 660' from quarter section line. (Order 7-77.)	None
(Shut-in)	20				
Judith River (U. Cret.) Dual	1				
SHERARD WEST					
Eagle, Virgelle (U. Cret.)	1	Structural- Strat.	Volumetric Water Drive	160-acre spacing units; location no closer than 660' to unit boundary. (Order 90-76.)	None
(Shut-in)	1				
SHOTGUN CREEK, NORTH					
Gunton (Ord.)	2	Structural	Water Drive	320-acre spacing units consisting of two contiguous governmental quarter sections which may be in one or two sections with permitted well to be no closer than 660' to the unit exterior boundary and no closer than 1500' to any well producing from the same formation. IF NOT feasible to produce two zones separately, commingling permissible with prior administrative approval. (Order 49-77.)	None
Red River (Ord.)					
SIDNEY					
Mission Canyon (Miss.)	24	Structural	Water Drive	160-acre spacing units for Madison Group. One well per spacing unit to be located no closer than 660' from unit boundary and no closer than 1650' to well producing from the same formation. (Order 5-79.) Field enlargement. (Order 99-80.)	Excess water injected into Dakota formation. (Order 41-A-78.)
(Shut-in)	1				
Red River (Ord.)	2				
SIONEY, EAST					
Madison	9	Strat.	Water Drive		
SINGLETREE					
Red River (Ord.)	1	Structural	Volumetric	State-wide.	Produced water disposed into Dakota Formation. (Order 59-A-80.)
SIoux PASS					
Interlake (Sil.)	1	Structural	Volumetric Water Drive	320-acre spacing units consisting of two adjacent governmental quarter sections lying N-S or E-W at operator's option. Permitted well no closer than 660' from unit boundary. (Interlake and Red River). 160-acre spacing unit (Mission Canyon) with well no closer than 660' from unit boundary. Commingling of Interlake and Red River production authorized. (Order 10-75.) Amended field boundary. (Order 15-77.) Field reduction. (Order 89-81.)	Excess water injected into Dakota formation. (Order 15-A-75.)
Red River (Ord.)	6				
Mission Canyon	1				

Field, Formation, Age	No. Prod Wells	Type of Trap	Probable Drive Mechanism	Spacing Regulations Field Rules, and Remarks	Secondary or Water Disposal
SIoux PASS, EAST Red River (Ord.)	1	Structural- Strat.	Water Drive	State-wide.	None
SIoux PASS, MIDDLE Red River (Ord.)	6	Structural	Water Drive	320-acre spacing units to consist of two contiguous governmental quarter sections at operator's option. Location to be no closer than 660' from exterior boundary of unit and no closer than 1650' from well producing from same formation. Commingling permissible with Administrative approval. (Order 55-76.) An exception to Order (55-76) by (Order 39-81.)	None
SIoux PASS, NORTH Interlake (Sil.) Red River (Ord.) Dual Winnipegosis (Dev.) Nisku (Dev.) Red River (Ord.) Dual Red River (Ord.) (Shut-in) Madison (Miss.) (Shut-in)	1 1 12 1 1 1	Structural	Unknown Water Drive	320-acre spacing units with well location at least 660' from unit boundary. (Order 12-75.) Field enlarged. (Order 16-75.) Commingling from Interlake and Red River approved. (Order 36-76.) Field Extension. (Order 12-77.) Orders (12-75, 16-75 and 12-79) Amended by (Order 8-79.) Field extension (Order 13-79.) Orders 12-75, 12-77, 8-79, and 13-79 amended to allow 150' tolerance closer to quarter section line or nearest well producing from same reservoir for topographical reasons. (Order 10-81.) Field enlargement. (Order 48-81.)	Produced water injected into Dakota-Lakota formations. (Order 34-A-75.)
SIoux PASS, NORTH-DUPEROW Duperow (Dev.)	1	Structural	Water Drive	320-acre spacing unit consisting of NE ¼ Sec. 11 and NW ¼ Sec. 12, T 26 N, R 57 E. (Order 107-80.)	None
SNOOSE COULEE Bow Island (L. Cret.) Gas (Shut-in)	7 1	Structural- Strat.	Volumetric	640-acre spacing units; location no closer than 990' from spacing unit boundary. Bow Island and shallower Formations. (Order 18-18-77.)	None
SNOW COULEE Sunburst (L. Cret.) Gas (Shut-in)	1	Strat.	Depletion	Spacing units. E½ section 33 and W½ section 34, 36N-4E designated as spacing units. (Order 78-76.)	None
SNOWDEN Mission Canyon (Miss.)	1	Structural	Water Drive	Statewide.	None
SNYDER Tensleep (Penn.) (Shut-in)	3 1	Structural	Water Drive	10-acre spacing units with center 5-spot permitted; 150' topographic tolerance. (Order 45-62.)	None
SOAP CREEK Tensleep, Amsden, Madison (Penn.) (Penn.) (Miss.) (Shut-in)	24 1	Structural	Water Drive	One well per 10-acre spacing unit per producing formation; well location in center of spacing unit with 100' topographic tolerance. (Order 26-60.)	None
SOAP CREEK, EAST Tensleep (Penn.)	3	Structural	Water Drive	State-wide.	None
SOBERUP COULEE Bow Island (L. Cret.) Gas (Shut-in)	6	Structural	Water Drive	320-acre spacing units; well location to be no closer than 660' from the unit boundary (Order 25-79.)	None
SOUTH FORK Red River (Ord.)	3	Structural	Water Drive	State-wide.	None

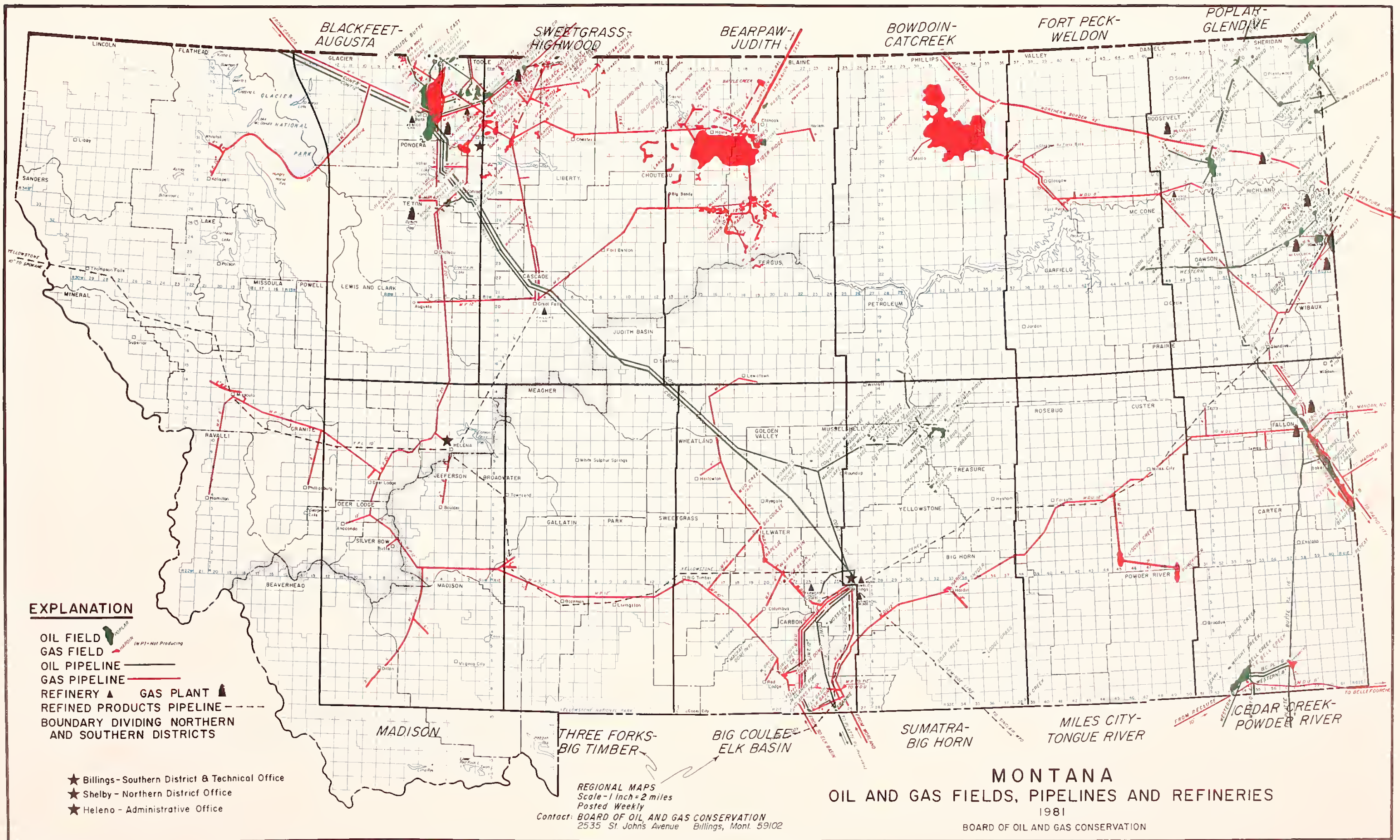
Field, Formation, Age	No Prod. Wells	Type of Trap	Probable Drive Mechanism	Spacing Regulations, Field Rules, and Remarks	Secondary or Water Disposal
SPRING LAKE					
Nisku (Dev.) (Shut-in)	1	Structural	Depletion	One well per 160-acre spacing unit. Well location anywhere within 840' square in center of spacing unit. (Order 6-63.) Field redelineation. (Orders 30-76, 49-76.)	None
Red River (Ord.)	2	Structural	Depletion		
SPRING LAKE, SOUTH					
Red River (Ord.)	1	Structural	Water Drive	Single spacing unit. (Order 81-81.)	
STAMPEDE					
Red River (Ord.)	1	Structural	Depletion	State-wide.	None
STRAWBERRY CREEK					
Bow Island-Blackleaf (L. Cret.) Gas	2	Structural-Strat.	Volumetric Water Drive	State-wide.	None
(Shut-in)	2				
STENSVADE					
Tyler (Penn.) (Shut-in)	4 11	Strat.	Depletion	40-acre spacing units; well location in center of spacing unit with 200' tolerance. (Orders 2-59, 7-60.) Wells may be drilled anywhere within waterflood unit boundary, no closer than 660' from unit boundary. (Order 5-65, Amended.)	A waterflood operation has been in progress since 1963, using Madison water. (Orders 48-67, 9-67.) Excess produced water disposed into Madison (Order 70-A-76.)
STRATER					
Phillips Gas (Shut-in)	2	Strat.	Volumetric	160-acre spacing units; Well location to be no closer than 660' from quarter section line. (Order 103-81.)	None
SUMATRA					
Tyler (Penn.) Oil & Gas (Shut-in)	90 23	Strat.	Depletion	40-acre spacing units; well located in center of unit with 75' tolerance. (Order 14-58.) Field redelineated. (Order 14-75.) Vacuum pumps permitted on certain wells. (Order 99-79.) and (Order 32-80.)	Seven waterflood units using Madison water. (Orders 48-67, 6-69, 19-69, 23-69, 5-75, 21-78, and 43-80.) Produced water disposed into Madison formation. (Order 7-A-76.)
SUNNYHILL					
Red River (Ord.) Oil & Gas	2	Structural	Volumetric Water Drive	320-acre spacing units; location to be no closer than 660' to the section or quarter section line which is the exterior boundary of the unit nor closer than 1650' to any well producing from same formation. (Order 39-78.)	Produced water disposed into Dakota formation. (Order 27-A-80)
Madison (Miss.)	2	Structural	Water Drive		
SWANSON CREEK					
Phillips (U. Cret.) Gas (Shut-in)	14 24	Strat.	Depletion	320-acre spacing units; (Order 36-75) amended to enlarge field and provide that spacing units may run N-S or E-W at operator's option with permitted wells to be no closer than 990' to section or quarter section line. (Order 11-78.) Field boundaries extended. (Order 32-78.) Field extension (Order 92-79.) Field extension (Order 66-80.) Section 4-32N-34E included in Field with spacing units designated as E/2 and W/2 of Section 4. (Order 55-81.)	None
THIRTY MILE					
Eagle (U. Cret.) (Shut-in)	3	Structural	Unknown	State-wide.	None
THREE BUTTES					
Guntton & RR	3	Structural	Water Drive	160-acre spacing units, well location no closer than 660' from governmental quarter section line or unit boundary. (Order 11-81.)	
THREE MILE					
Eagle (U. Cret.) (Shut-in)	1 2	Structural	Volumetric Water Drive	State-wide.	None

Field, Formation, Age	No. Prod. Wells	Type of Trap	Probable Drive Mechanism	Spacing Regulations, Field Rules, and Remarks	Secondary or Water Disposal
TIBER					
Bow Island (L. Cret.) Gas	3	Strat.	Volumetric	Spacing allows one well for each gas producing horizon to be located anywhere within the section but no closer than 990' to the section line. (Order 143-81.)	None
TIBER, EAST					
Bow Island (L. Cret.) Gas (Shut-in)	1	Strat.	Volumetric	State-wide.	None
TIBER, SOUTH					
Colorado (Cret.) Gas	1	Strat.	Unknown	State-wide.	None
TIGER RIDGE					
Judith River (U. Cret.) Gas (Shut-in)	5 2	Structural- Strat.	Volumetric Water Drive	Field delineated. (Orders 17-67, 23-68) re-delineated and established. State-wide spacing. (Order 10-70.)	Excess produced water injected into Eagle formation. (Orders 19-A-73, 46-A-75.) (Order 19-A-73) Amended by (Order 60-A-78.)
Eagle (U. Cret.) Gas (Shut-in)	219 48	Structural Strat.	Volumetric Water Drive	State-wide for field area not unitized. Two units: wells to be located no closer than 990' from unit boundary (Orders 11-72, 41-72) 160-acre spacing units; Sections 20, 21, 22, 27, 28, 33, 34, 32N-16E (Judith River) locations to be no closer than 660' from unit boundary (Order 32-73) Enlarge and redelineate Field (Order 13-75) 160-acre spacing units in Sections 22, 23, 24, 32N-14E (Eagle & Virgelle) wells to be located no closer than 990' from section line and 660' from quarter section line (Order 37-75) 160-acre spacing units; NW¼ & NE¼ Section 30, T-31N, R-17E well to be located at least 990' from quarter section line. 75' tolerance allowed for topographic reasons (Order 51-77.) 160-acre spacing units; Sections 32, 33, 31N-17E & Section 4, 30N-17E (Eagle) to be located no closer than 990' to a section line and 660' to quarter section line. (Order 52-77.) Field enlargement (Order 46-78.) Field enlargement. (Order 48-79.) Amendment to (Orders 17-67, 23-68 and 10-70) to establish 320-acre spacing units in certain areas. (Order 79-79.) Field enlargement and amending field rules to certain portions thereof (Order 26-80.) Amendment to (Orders 17-67, 23-68, and 10-70) to allow an additional well in certain sections (Orders 50-80 and 51-81.) Amendment to (Order 13-75) that allows one well per 160-acre spacing unit for Eagle formation with location to be no closer than 990' to boundaries of quarter section underlying section 35, T 32 N, R 18 E. (Order 54-80.)	
TIGER RIDGE, NORTH					
Eagle (U. Cret.)	1	Structural	Volumetric Water Drive	160-acre spacing units; one well per horizon per spacing unit from the Virgelle formation to the surface. Well to be no closer than 990' to the section line nor closer than 660' to the interior quarter section line (Order 80-79.)	None
TIGER RIDGE, SOUTH					
Eagle (U. Cret.)	1	Structural	Volumetric Water Drive	State-wide.	None
TIMBER CREEK					
Sunburst (L. Cret.) Gas (Shut-in)	2	Strat.	Depletion	320-acre spacing consisting of two adjacent governmental quarter sections lying N-S or E-W at operator's option. Permitted well no closer than 660' from spacing boundary and 990' from field boundary. (Order 24-75.)	None
TIMBER CREEK, WEST					
Sunburst (L. Cret.) Gas (Shut-in)	1	Strat.	Depletion	640-acre one well spacing unit. (Order 91-76.)	None

Field, Formation, Age	No. Prod. Wells	Type of Trap	Probable Drive Mechanism	Spacing Regulations, Field Rules, and Remarks	Secondary or Water Disposal
TIPPY BUTTES Tyler (Penn.)	2	Strat.	Depletion	State-wide.	None
TRAIL CREEK Sunburst (L. Cret.) Gas (Shut-in)	3	Structural-	Water Drive	One well per 320 acres consisting of S½ and N½ of each governmental section but not closer than 990' from spacing boundary. (Orders 33-70, 28-76.) Field enlargements (Order 135-80.)	None
Bow Island (L. Cret.) Gas (Shut-in)	2	Strat.	Volumetric		
TULE CREEK Nisku (Dev.)	3	Structural	Water Drive	160-acre spacing units with permitted well anywhere within 1320' square in center of each unit. (Orders 26-62, 6-65, 11-67, 5-77.)	Produced water injected into Dakota and Judith River formations. (Orders 12-66, 24-67, 8-A-76, 134-A-81.)
(Shut-in)	4				
TULE CREEK, EAST Nisku (Dev.)	2	Structural	Water Drive	160-acre spacing units with permitted well anywhere within 1320' square in center of each unit. (Orders 40-64, 6-65.)	Water injected into Judith River formation. (Order 13-68.) Water injected into Nisku formation. (Order 28-A-79.)
(Shut-in)	1				
TULE CREEK, SOUTH Nisku (Dev.)	2	Structural	Water Drive	160-acre spacing units with permitted well anywhere within a 1320' square in center of each unit.	Authority given to dispose of produced water into Dakota. (Order 44-64.) Into Judith River formation. (Order 29-67.)
TWO FORKS Judith River (U. Cret.) Gas	1	Structural	Volumetric	State-wide	None
Eagle (U. Cret.) Gas	1				
TWO MEDICINE CREEK Sun River (Miss.)	1	Structural	Volumetric	State-wide.	Produced water disposed into Cut Bank formation (Order 89-A-80.)
		Strat.	Water Drive		
TWO WATERS Red River (Ord.)	1	Structural	Water Drive	State-wide.	None
UTOPIA, GAS Sawtooth (Jur.) Gas	6	Structural	Depletion	640-acre spacing units; well location may be anywhere within the unit but no closer than 990' to any governmental section line (Order 13-80.)	None
(Shut-in)	3		Water Drive		
UTOPIA SWIFT Swift (U. Jur.) Oil	12	Structural	Water Drive	40-acre spacing units; location to be in center of quarter-quarter section with no more than 100' topographic tolerance. (Order 9-78.) Order 9-78 amended. Spacing units shall consist of 1 well per qtr. qtr. section no closer than 330' from the section boundary. (Order 96-81.)	None
(Shut-in)	1				
VAUX Red River (Ord.)	6	Structural	Water Drive	State-wide.	Produced water injected into the Dakota formation. (Order 44-A-79.)
(Shut-in)	1				
Mission Canyon (Miss.)	8				
(Shut-in)	1				
Interlake (Sil.)	2				
VIDA Interlake (Sil.)	2	Structural	Water Drive	160-acre spacing units with permitted well anywhere within an 840' square in center of each unit. (Order 39-63.) Field Area reduction. (Order 79-76.)	Water injected into Lakota formation. (Order 14-68.)
VIKING Dawson Bay (Dev.)	1	Structural-	Water Drive	320-acre spacing units, designated; to be located no closer than 660' to the unit exterior boundary and no closer than 1500' to any well producing from the same formation. If not feasible to produce two zones separately, commingling permissible with prior administrative approval. (Order 50-77.)	None
Winnipegosis					

Field, Formation, Age	No. Prod. Wells	Type of Trap	Probable Drive Mechanism	Spacing Regulations, Field Rules, and Remarks	Secondary or Water Disposal
VOLT					
Nisku (Dev.)	4	Structural	Water Drive	160-acre spacing units with permitted well any- where within a 1320' square in center of each unit. (Orders 27-64, 6-65, 32-65.)	Excess produced water is dis- posed into Judith River. (Orders 3-65, 37-A-74.)
(Shut-in)	1				
Charles "C" (Miss.)	1	Structural	Water Drive	State-wide.	
WAGON BOX					
Tyler (Penn.)	1	Structural-	Unknown	State-wide.	None
(Shut-in)	1	Strat.			
WEED CREEK					
Amsden (Penn.)	1	Structural	Water Drive	State-wide.	None
WELDON					
Kibbey (Miss.)	1	Structural	Partial Water	80-acre spacing unit; each quarter section divided into two separate units running in either a north- south or east-west direction; well location in center of NE¼ and SW¼ of quarter section with 200' topographic tolerance. (Order 9-65.)	Excess produced water is dis- posed into the Dakota, Lakota, Morrison, Charles, and Kibby for- mations (Orders 31-65, 47-65, 37-66, 16-67, 51-A-81, 118-A- 81, 128-A-81.)
(Shut-in)	2		Drive		
WEST BUTTE					
Sunburst (L. Cret.) Oil	4	Structural-	Depletion	State-wide, except W½ Section 16 is considered a single spacing unit.	None
(Shut-in)		Strat.			
Bow Island (L. Cret.) Gas	1				
(Shut-in)					
Sawtooth (Jur.) Gas	3	Structural	Water Drive	Sawtooth-Madison gas commingled, unitized (Order 5-72.) No well closer than 330' from unit boundary.	
(Shut-in)	1				
Madison (Miss.) Gas					
WEST BUTTE SHALLOW GAS					
Bow Island (L. Cret.)	1	Structural-	Volumetric	160-acre spacing units; with one well to be per- mitted to produce from each individual gas pro- ducing formation above the top of the Kootenai to the surface within each 160-acre spacing unit. Well locations to be anywhere within the spacing unit but not closer than 990' feet from the spacing unit boundaries. (Order 39-77.)	None
(Shut-in)		Strat.			
WHITLASH					
Bow Island, Kootenai, Swift Oil	71	Structural-	Volumetric	Gas: 300' from legal subdivision line and 2400' between wells, 75' topographic tolerance.	None
(Cret.) (Jur.)	18	Strat.		Oil: 330' from legal subdivision line and 650' between wells; 5-spot location at center of 40-acre tract permitted; 75' topographic tolerance.	
Gas	43			General Rules 207, 211, 219, 221, 223, and 224 suspended. (Orders 16-54, 27-70.) Order 16-54 amended to include S/2 of section 30-37N-4E.	
(Shut-in)	4			SW/4 of 30 is 1 spacing unit, SE/4 is the other. Well location no closer than 990' from spacing unit boundary. (Order 45-81.)	
Madison (Miss.) Gas	1				
WHITLASH, WEST					
Sunburst, Swift Oil	3	Structural-	Volumetric	Gas: 160-acre spacing units consisting of quarter sections; well location anywhere within a 660' square in center of spacing unit.	None
(Cret.) (Jur.)		Strat.		Oil: 330' from legal subdivision line, 650' be- tween wells in same reservoir on same lease; 5-spot location permitted. (Orders 61-62, 22-65 as amended.) (Order 61-62) Amended by (Order 48-77.) Field extension. (Order 18-79)	
Gas	12				
(Shut-in)					
Sawtooth (Jur.)	1				
(Shut-in)					
WILLIAMS					
Bow Island (L. Cret.) Gas	16	Structural	Volumetric	640-acre spacing unit; well to be located no closer than 990' to exterior boundary for all formations above the Kootenai (Order 49-79.) Amendment enlarging field boundary (Order 102-79.)	None
WILLOW CREEK, NORTH					
Tyler (Penn.) Oil	2	Structural-	Depletion	State-wide.	Pilotflood. (Order 19-72.)
(Shut-in)	1	Strat.	Water Drive		

Field, Formation, Age	No. Prod. Wells	Type of Trap	Probable Drive Mechanism	Spacing Regulations, Field Rules, and Remarks	Secondary or Water Disposal
WILLOW RIDGE					
Bow Island (L. Cret.) Gas (Shut-in)	11 3	Structural- Strat.	Volumetric	640-acre spacing units; location to be no closer than 990' to unit boundary for gas production from all formations to the top of the Kootenai. (Order 29-78.)	None
Burwash (Cret.) Oil	4			40-acre spacing units with permitted 5 wells; well may be located in the center of each 10 acre quarter, quarter, quarter section and one in the center of each 40-acre subdivision with a 75' topographic tolerance allowed. (Order 30-78.)	
WILLOW RIDGE, SOUTH					
Bow Island (L. Cret.) Gas	2	Structural Strat.	Volumetric	State-wide.	None
WILLS CREEK, SOUTH					
Interlake (Sil.)	3	Structural	Partial Water Drive	160-acre spacing units. Well location in center of SE¼ of each unit with 175' topographic tolerance. (Orders 5-64, 30-66.)	Waterflood initiated 12-1-73. (Order 23-73.)
WINNETT JUNCTION					
Tyler (Penn.) (Shut-in)	3 3	Strat.	Depletion Water Drive	20-acre spacing units. Units to be designated as W½ and E½ of quarter-quarter section, no closer than 120' to the boundary of a spacing unit. (Order 57-76.) Certain lands bound by (Order 57-76) vacated by (Order 41-77.)	A waterflood operation commenced October 1, 1977 into Tyler formation. (Order 41-77.)
WISHBONE					
Swift (U. Jur.)	1	Strat.	Depletion	Single spacing unit. (Order 87-81.)	None
WOLF SPRINGS					
Amsden (Penn.) (Shut-in)	4 1	Structural	Water Drive	80-acre spacing units consisting of N½ and S½ of each quarter section. Well location in center of NW¼ and SE¼ of each quarter section with 75' topographic tolerance. (Orders 4-56, 9-59.) Field Area reduction (Order 92-76.)	None
WOODROW					
Interlake (Sil.)	1	Structural	Water Drive	80-acre spacing units consisting of any two adjacent quarter-quarter sections; well locations in center of NE¼ and SW¼ of each quarter section with 200' topographic tolerance. (Order 47-62.)	Produced water injected into Dakota. (Order 48-62.)
Red River (Ord.)	1				
WRANGLER					
Red River (Ord.)	2	Structural	Water Drive	State-wide.	None
WRANGLER, NORTH					
Red River (Ord.)	1	Structural	Water Drive	State-wide.	None
WRIGHT CREEK					
Muddy (L. Cret.) (Shut-in)	3 1	Structural- Strat.	Depletion Water Drive	80-acre spacing consisting of N½ and S½ of quarter section with locations in NW¼ and SE¼ of each quarter section with 200' tolerance. Field Area reduction (Order 69-76.)	Excess produced water is disposed of into the Muddy formation. (Order 8-A-77.)
XENA					
Judith River (U. Cret.) Gas	1	Structural Strat.	Volumetric Water Drive	State-wide.	None
YATES					
Duperow (Dev.)	1	Strat.	Water Drive	320-acre spacing units; Well locations as specified for the Duperow and Red River formations that may be dually completed. (Order 92-81.)	None



STATE OF MONTANA SUMMARY OF PRODUCING OIL FIELDS — 1981

LINE NO.	FIELD	COUNTY	PRODUCING FORMATION	YEAR OF DISCOVERY	DEPTH	GRAVITY ° API	F V F.	NET PAY FT.	PORO-SITY (%)	% WATER	RECOVERY FACTOR %		PRODUCTIVE AREA ACRES	OOIP		ULTIMATE RECOVERY					1981 PRODUCTION		CUMULATIVE PRODUCTION 1-1-82 (M BBLs)	RESERVES (M BBLs)	LINE NO.
											PRIMARY	SECONDARY		(M BBLs)	BBLs/ACRE	PRIMARY (M BBLs)	SECONDARY (M BBLs)	TOTAL (M BBLs)	BBLs./ ACRE	BBLs./ ACRE FT	BBLs	BOPD			
1	Alkali Coulee	Sheridan	Red River	1981	10,900	44		5					320								8,070	22	8	—	1
2	Andes	Richland	Red River	1979	12,100	45		25					320								5,266	14		2	2
3	Anvil	Roosevelt	Nisku	1981	10,600	40		9					160								9,998	27	10	—	3
4	Anvil	Roosevelt	Red River	1978	12,600	47	1 63	26 14		32	24	—	640	7,540	11,780	1,830	—	1,830	2,860	110	312,901	857	700	1,130	4
5	Anvil, North	Sheridan	Ratcliffe	1980	8,400	37		58					160								5,636	15		4	5
6	Arch Apex	Toole	Sunburst	1972	2,000	38		4													5,830	16		20	6
7	Ash Creek	Big Horn	Shannon	1952	4,500	34	1 05	14 22		42	25	5	200	2,640	13,200	660	180	800	4,00	286	7,543	21	791	9	7
8	Bainville, North	Roosevelt	Ratcliffe	1980	8,800	30		13					160								5,913	16		22	8
9	Bainville, North	Roosevelt	Red River	1979	12,400	43	1 55	40 9		32	12		960	11,763	12,253	1,380		1,380	1,437	36	91,384	250	755	625	9
10	Bainville, North	Roosevelt	Winnipegosis	1979	11,400	44	1 60	35 7		20	9		320	3,040	9,500	280		280	875	25	47,251	129	131	149	10
11	Bainville, West	Roosevelt	Red River	1978	8,500	34	1 50	12 6		45	15	—	960	1,970	2,050	140	—	140	146	12	27,778	76	90	50	11
12	Bannatyne	Teton	Swilt	1927	1,500	27	1 05	39 15		43	5	—	270	6,650	24,635	350	—	350	1,296	5	12,750	35	266	84	12
13	Bears Den	Liberty	Swilt	1924	2,300	39	1 08	20 9		35	16	—	280	3,140	11,210	490	—	490	1,750	87	8,326	23	464	26	13
14	Bellry	Carbon	Tensleep, Mosser, Sand	1981	9,900	59		18					160								3,013	8	3	—	14
15	Bell Creek Total	Powder River	Muddy	1,967	4,400	36	1 11	10 26		23	26	28	13,440	243,990	13,990	64,000	67,650	131,650	9,795	980	3,271,322	10,195	116,580	15,070	15
16	Benrud	Roosevelt	Nisku	1962	7,650	43	1 41	22 16		30	19	—	160	2,170	13,550	410	—	410	2,560	116	1,891	5		—	16
17	Benrud, East	Roosevelt	Nisku	1962	7,500	46	1 37	22 15		30	43	—	480	6,280	13,080	2,720	—	2,720	5,667	258	52,670	144	2,453	267	17
18	Benrud, Northeast	Rosevelt	Nisku	1964	7,400	46	1 40	23 16		30	42	—	160	2,280	14,270	960	—	960	6,000	261	9,531	26	918	42	18
19	Berthelole	Toole	Sunburst	1,955	2,400								40								702	2		—	19
20	Big Gully	Musselshell	Tyler	1976	3,800	30	1 25	11 16		30	15	—	80	610	7,650	90	—	90	1,125	102	3,074	8	86	4	20
21	Big Gully, North	Musselshell	Tyler	1976	3,800	—		4													3,045	8		8	21
22	Big Muddy Creek	Roosevelt	Mission Canyon	1981	8,500	44		14													5,198	14	5	—	22
23	Big Muddy Creek	Roosevelt	Red River	1975	11,900	48	1 72	11 14		36	18	—	1,280	5,700	4,450	1,050	—	1,050	820	75	54,190	148		190	23
24	Big Wall	Musselshell	Amsden	1953	2,500	19	1 01	17 16		35	24	—	280	3,800	13,580	900	—	900	3,214	189	27,774	76	842	58	24
25	Big Wall (Non Unit)	Musselshell	Tyler	1948	3,000	31	1 02	22 17		40	29	1	1,220	20,830	17,070	6,050	230	6,280	5,148	234	37,406	102	6,240	40	25
26	Big Wall (Tyler B Unit)	Musselshell	Tyler																		18,536	51		36	26
27	Black Diamond	Wibaux	Red River	1981	11,310	27	1 31	4													13,670	37	14	—	27
28	Blackfoot	Glacier	Greenhorn, Cut Bank, Madison		3,500	30	1 11	15 15		35	86	—	160	1,640	10,220	1,410	—	1,410	8,813	588	28,473	78	1,169	241	28
29	Blue Hill	Richland	Red River	1977	12,600	48	1 35	32 10		60	6	—	320	2,360	7,360	130	—	130	406	13	9,727	27	120	10	29
30	Border (Non Unit)	Toole	Cut Bank	1929	2,400	31	1 08	22 15		30	21	2	360	5,970	16,590	1,240	120	1,360	3,778	172	5,987	16	1,337	23	30
31	Border (Old Border Unit)	Toole	Cut Bank																		2,807	8		10	31
32	Boulder	Richland	Red River	1976	10,400	46	2 30	11 22		16	12	—	160	100	6,860	150	—	150	938	85	6,143	17	129	—	32
33	Bowes (Sawtooth Unit)	Blaine	Sawtooth	1949	3,300	19	1 02	32 12		31	8	3	3,760	87,600	23,300	7,200	2,020	9,220	2,452	77	120,038	329	8,720	500	33
34	Box Canyon	Richland	Red River	1980	11,800	46		11					640								40,459	111		58	34
35	Bradley	Glacier	Madison, Sunburst	1959	3,500	26	1 25	6 11		49	52	—	240	500	2,090	260	—	260	1,083	181	6,184	17	227	33	35
36	Brady	Pondera	Sunburst	1942	1,500	34	1 01	10 12		30	13	—	140	900	6,450	120	—	120	857	86	23,813	65	89	31	36
37	Bredette	Roosevelt	Charles	1956	6,500	—		12													34,970	96		390	37
38	Breed Creek	Rosebud	Tyler	1976	4,900	32	1 15	20 15		37	41	—	160	2,040	12,750	830	—	8							

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											PRIMARY	SECONDARY		(M BBLs)	BBLs/ACRE	PRIMARY (M BBLs)	SECONDARY (M BBLs)	TOTAL (M BBLs)	BBLs./ ACRE	BBLs./ ACRE FT	BBLs	BOPD					
84	Dwyer (Dwyer Unit)	Sheridan	Ratcliffe																		121,387	333		1,928	84		
85	Eagle	Richland	Ratcliffe	1977	8,900	32	1.22	15	9	35	18	—	800	4,460	5,580	800	—	800	1,000	67	140,543	385	319	481	85		
86	Elk Basin	Carbon	Madison	1942	5,300	28	1.12	224	12	9	9	5	920	155,880	16,943	14,000	7,490	21,490	23,359	104	390,942	1,071	20,346	1,144	86		
87	Elk Basin	Carbon	Tensleep	1942	5,000	29	1.16	124	11	10	—	51	1,400	114,940	82,100	—	58,250	58,250	41,607	336	356,479	977	54,936	3,314	87		
88	Elk Basin, Northwest	Carbon	Tensleep	1964	6,000	37	1.15	27	12	22	10	3	580	9,890	17,050	1,000	300	1,300	2,241	83	9,582	26	1,277	23	88		
89	Enrd, North	Richland	Red River	1979	11,800	47	1.75	8	7	34	5	—	640	1,050	1,640	50	—	1,300	78	10	6,917	19	39	11	89		
90	Fairview	Richland	Mission Canyon													70	—	70			17,757	49	43	27	90		
91	Fairview (Non-unit)	Richland	Red River																		97,589	267		370	91		
92	Fairview (Northwest Unit)	Richland	Red River	1965	12,700	47	1.70	35	11	28	20	14	1,760	22,260	12,650	7,540	—	7,540	4,284	122	156,736	429	6,027	1,143	92		
93	Fairview, East	Richland	Red River																		67,572	185		—	93		
94	Fairview, West	Richland	Ratcliffe																		14,933	41	16	—	94		
95	Fertile Prairie	Fallon	Red River	1952	9,300	29	1.20	6	14	27	39	—	560	2,220	3,960	860	—	860	1,536	256	22,235	61	469	391	95		
96	Fishhook	Sheridan	Red River	1980	11,200	41	1.28	10	10	31	13	—	320	1,340	4,180	180	—	180	536	56	64,930	178	110	70	96		
97	Flai Coulee	Liberty	Swift	1933	2,900	37	1.10	18	21	35	12	4	1,320	22,870	17,330	2,800	770	3,570	2,705	150	161,868	443	3,562	2,156	97		
98	Flai Lake	Sheridan	Ratcliffe	1964	6,500	33	1.26	14	15	45	13	21	9,600	68,270	7,110	9,700	13,180	22,880	2,383	170	494,632	877	12,399	10,481	98		
99	Flai Lake, South	Sheridan	Ratcliffe	1966	6,500	32	1.26	9	12	45	26	—	946	4,100	3,660	1,230	—	1,060	1,100	105	70,610	193	882	178	99		
100	Fort Gilbert	Richland	Madison																		86,474	237		—	100		
101	Fort Gilbert	Richland	Red River	1970	12,500	48	1.89	42	12	20	6	—	1,280	21,180	16,550	1,300	—	1,300	1,016	24	37,758	103	1,178	122	101		
102	Four Mile Creek	Richland	Red River	1975	12,500	47	1.50	35	15	35	6	—	320	5,650	17,650	340	—	340	1,063	30	27,806	76	244	96	102		
103	Four Mile Creek, West	Richland	Red River	1976	12,500	45	1.30	15	13	40	24	—	320	2,230	6,980	540	—	540	1,688	113	37,099	102	138	402	103		
104	Fox Creek	Richland	Mission Canyon	1978	8,900	29	1.20	71	3	30	10	—	160	1,540	9,640	150	—	150	938	13	17,267	47	111	39	104		
105	Fox Creek, North	Richland	Silurian	1978	11,800	40	1.45	6	13	35	5	—	320	870	2,710	40	—	40	125	21	7,756	21	33	7	105		
106	Frannie	Carbon	Tensleep	1929	2,700	27	1.02	29	19	16	27	—	80	2,820	35,200	750	—	750	9,375	323	3,002	8	725	25	106		
107	Fred & George Creek	Toole	Sunburst	1963	2,600	39	1.20	31	27	30	22	14	920	34,850	37,900	7,700	4,800	12,250	13,315	430	276,506	758	12,036	1,224	107		
108	Frog Coulee	Richland	Red River	1979	11,000	49	1.42	15	18	35	3	—	320	3,070	9,590	100	—	100	313	21	15,685	43	94	6	108		
109	Froid, South	Roosevelt	Red River	1970	12,100	48	1.55	12	17	25	15	—	160	1,230	7,660	190	—	190	590	49	6,433	18	176	—	109		
110	Gage	Musselshell	Amsden																		24,174	66		17	110		
111	Gas City (Non-unit)	Oawson	Red River	1955	8,900	38	1.28	25	12	35	26	5	2,800	33,090	11,820	8,600	1,760	10,360	3,625	145	19,637	54	9,150	50	111		
112	Gas City (World)	Oawson	Red River																		117,210	321		950	112		
113	Glacier East	Glacier	Greenhorn Sh																		11,084	30		2	113		
114	Glendive	Oawson	Stoney Mountain	1952	8,900	38	1.24	147	8	35	21	—	1,280	60,730	47,440	12,990	—	12,990	10,148	69	169,455	464	11,456	1,534	114		
115	Golden Dome	Carbon	Greybull																		499	1		—	115		
116	Goose Lake	Sheridan	Ratcliffe, Red River	1962	7,000	34	1.20	40	16	55	6	3	6,880	128,100	18,620	8,000	3,580	11,580	1,683	42	225,067	618	7,467	4,113	116		
117	Graben Coulee	Glacier	Swift, C B , Madison	1961	2,900	34	1.10	15	12	30	38	—	470	4,180	8,890	1,700	—	1,700	3,617	241	78,689	216	1,441	655	117		
118	Grandview, East	Liberty	Swift	1978	2,500	—	—	5	—	—	—	—	80	—	—	40	—	40	750	150	3,543	10	17	23	118		
119	Green Coulee	Sheridan	Red River																		14,202	39		4	119		
120	Gumbo Ridge	Rosebud	Tyler	1975	4,900	32	1.10	16	13	35	22	33	240	2,290	9,540	500	760	1,260	5,250	328	45,259	124	395	865	120		
121	Gypsy Basin	Teton & Pondera	Sawtooth, Sunburst, Swift, Madison																						121		
				1958	—	—	—	—	—	—	—	—	—	—	—	400	—	400	—	—	44,716	123	311	89			
122	Hay Creek	Richland	Mission Canyon	1969	9,600	39	1.15	40	5												1,469	37	14,779	40	200	270	122
123	Hay Creek	Richland	Red River	1969	12,600	46	1.90	53	12	30	16	—	320	3,020	9,400	470	—	470	990	19	10,432	29	949	1	123		
124	Hiawatha	Musselshell	Tyler	1967	5,000	33	1.15	34	12	25	5	—	960	18,700	19,480	950	—	950	3,800	112	30,953	85	1,380	140	124		
125	Hibbard	Rosebud	Amsden							30	20	—	400	7,710	19,270	1,520	—	1,520			5,509	15		19	125		
126	High Five	Rosebud	Tyler	1976	5,600	33	1.15	20	20												2,417	121	165,602	454	1,244	1,076	126
127	Highview	Pondera	Madison	1967	3,200	31	1.10	8	17	32	11	2	960	17,620	18,350	2,000	320	2,320	833	104	4,899	13	13	87	127		
128	Honker	Sheridan	Red River B & C	1980	11,110	39	1.40	30	14	58	21	—	120	480	4,030	100	—	100	—	—	18,419	50	26	24	128		
129	Injun Creek	Rosebud	Tyler, Stensvad							30	—	—	320	5,213	16,292	50	—	50			7,696	21		—	129		
130	Intake II	Richland	Red River																		50,458	138		—	130		
131	Ivenhoe	Musselshell	Tyler	1956	4,100	33	1.08	29	15	20	26	—	600	15,000	25,000	3,930	—	3,930	6,550	226	14,917	41	3,925	5	131		
132	Jim Coulee (Jim Coulee Unit)	Musselshell	Tyler	1971	3,700	33	1.10	37	15	33	16	13	840	22,030	26,230	3,500	2,880	6,380	7,595	205	121,912	334	3,584	2,796	132		
133	Jim Coulee, North	Musselshell	Tyler																		4,590	13		12	133		
134	Katy Lake North	Sheridan	Mission Canyon																		24,453	67	495	—	134		
135	Katy Lake North	Sheridan	Red River	1979	11,300	46	1.42	19	15	30	—	—	1,280	—	—	11,320	—	11,320	—	—	355,080	973	826	10,494	135		
136	Keg Coulee (Non-unit)	Musselshell	Tyler	1960	4,600	33	1.15	19	14	32		243	1,500	18,550	12,200	4,510	550	5,060	3,329	175	45,558	125	4,928	132	136		
137	Keg Coulee (Tyler CSU)	Musselshell	Tyler																		9,604	26		35	137		
138	Keg Coulee North	Musselshell	Tyler	1964	4,600	33	1.15	14	12	32	25	—	240	1,850	7,710	460	—	460	1,917	137	16,841	46	374	86	138		
139	Kelley (Tyler Sand Unit)	Musselshell	Tyler	1966	4,400	33	1.15	50	13	30	8	5	240	7,370	30,700	560	380	940	3,917	78	16,150	44	896	44	139		
140	Kevin Sunburst	Toole	Sunburst	1922	1,500	32	1.08	7	20	35	27	3	40,200	262,780	6,540	70,000	7,970	77,970	1,940	277	501,542	1,374	73,786	4,184	140		
141	Kincheloe Ranch, West	Rosebud	Tyler																		89,761	246		—	141		
142	Land Creek (Land Creek Unit)	Liberty	Swift	1968	2,800	39	1.10	14	16	25	8	2	480	5,690	11,850	420	130	700	1,146	82	11,839	32	523	27	142		
143	Lambert	Richland	Red River																		48,974	134		22	143		
144	Leary	Powder River	Muddy	1969	5,800	41	1.15	7	17	33	33	—	400	2,150	5,380	710	—	710	1,775	254	32,463	89	415	295	144		
145	Little Beaver	Fallon	Red River	1952	8,300	29	1.40	37	12	35</																	

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											PRIMARY	SECONDARY		(M BBLs)	BBLs/ACRE	PRIMARY (M BBLs)	SECONDARY (M BBLs)	TOTAL (M BBLs)	BBLs / ACRE	BBLs / ACRE FT	BBLs	BOPO			
166	Mon Oak, West	Richland	Madison	1976	9,200	30	1 30	100 4	60	4	—	—	10.880	103,900	9,550	3,720	—	3,720	342	3	546,681	1,498	2,647	1,073	166
167	Mon Oak, West	Richland	Red River	1976	12,200	48	1 64	45 10	43	22	—	—	2,240	27,170	12,130	6,080	—	6,080	2,714	60	407,393	1,116	1,617	4,463	167
168	Monarch	Fallon	Siluro-Ord	1958	8,400	32	1 10	31 7	35	18	4	—	2,720	27,060	9,950	4,900	960	5,860	2,154	69	149,014	408	4,285	1,575	168
169	Mosser Dome	Yellowstone	Kootenai	1936	1,000	22	1 01	15 24	30	22	—	—	100	1,940	19,360	420	—	420	4,200	280	7,570	21	300	120	169
170	Muslang	Richland	Red River	1979	12,500	47	1 41	17 12	—	—	—	—	640	—	—	900	—	900	516	30	79,514	218	190	710	170
171	Nohy	Richland	Red River	1972	12,900	46	1 43	27 10	40	26	—	—	640	5,630	8,790	1,480	—	1,480	2,313	86	55,301	152	1,011	469	171
172	North Fork	Richland	Madison	1977	9,500	38	—	—	—	—	—	—	160	—	—	170	—	170	1,250	—	16,471	45	93	77	172
173	North Fork	Richland	Red River	1976	12,700	45	1 50	12 14	57	11	—	—	320	1,200	3,740	130	—	130	406	34	9,574	26	115	15	173
174	Ollie	Fallon	Ouperow																		70,707	194	—	—	174
175	Ollie	Fallon	Red River	1980				56							320	150	—	150	469	8	20,639	57	33	—	175
176	Ottis Creek	Richland	Red River	1970	12,700	48	1 76	23 12	35	7	—	—	1,280	10,120	7,900	750	—	750	586	25	54,088	148	643	107	176
177	Otter Creek	Sheridan	Red River																		10,399	28	—	—	177
178	Outlook	Sheridan	Ouperow	1964	8,200	39	1 50	15 10	25	42	—	—	640	3,720	5,820	1,550	—	1,550	2,422	161	80,873	222	1,432	118	178
179	Outlook	Sheridan	Red River, Siluro-Ord	1956	9,000	38	1 12	20 8	30	63	—	—	1,600	12,410	7,760	7,820	—	7,820	4,888	244	45,700	125	5,542	2,278	179
180	Outlook	Sheridan	Winnipegosis	1971	9,000	39	1 12 18	8	30	20	—	—	480	3,350	6,980	670	—	670	1,396	78	17,176	47	603	—	180
181	Outlook, South	Sheridan	Winnipegosis	1957	9,100	39	1 12	18 8	30	21	—	—	480	3,350	6,980	690	—	690	1,437	80	6,467	18	664	26	181
182	Outlook, West	Sheridan	Winnipegosis	1958	9,100	39	1 12	16 8	30	21	—	—	480	2,980	6,200	620	—	620	1,292	81	15,229	42	573	47	182
183	Oxbow	Roosevelt	Red River	1978	12,600	47	1 50	18 12	45	10	—	—	320	1,970	6,140	200	—	200	625	35	27,358	75	149	51	183
184	Palomino	Roosevelt	Nisku																		152,825	419	—	418	184
185	Pelican	Sheridan	Red River	1979	11,400	47	1 30	19 6	25	14	—	—	320	1,630	5,100	230	—	230	719	38	21,491	59	66	164	185
186	Pennel	Fallon	Mission Canyon	1955	7,000	31	1 10	38 3	30	17	—	—	720	11,050	5,630	700	—	65,000	90,278	2,37	3,022,019	8,280	49,738	15,262	186
187	Pete Creek	Toole	Sunburst																		1,708	5	10	4	187
188	Phantom	Toole	Sunburst	1976	2,700	38	1 09	12 20	35	3	—	—	120	1,330	11,100	40	—	40	333	28	2,429	7	37	3	188
189	Pine (A Unit)	Prairie	Madison	1952	8,400	34	1 17	32 12	30	24	23	—	13,320	237,410	17,820	57,000	54,000	111,000	8,333	260	1,848,080	5,063	93,713	17,287	189
190	Pondera	Pondera	Sun River	1927	2,100	34	1 20	15 16	31	44	—	—	5,560	59,530	10,710	26,390	—	26,390	4,746	316	343,919	942	22,080	—	190
191	Pondera Coulee	Pondera	Sun River																		4,947	14	35	31	191
192	Poplar, East & Southeast	Roosevelt	Charles	1952	5,500	40	1 10	25 11	30	19	—	—	18,070	245,330	13,580	47,590	—	47,590	2,634	105	267,282	719	43,344	4,246	192
193	Poplar, East	Roosevelt	Heath	1969	4,900	38	1 10	8 11	50	25	—	—	480	1,490	3,100	370	—	370	771	96	5,355	15	251	119	193
194	Poplar, East	Roosevelt	Nisku	1969	7,300	42	1 40	12 8	50	27	—	—	320	850	2,660	230	—	230	719	60	3,588	10	220	10	194
195	Poplar, Northwest	Roosevelt	Madison	1952	6,300	40	1 10	16 10	45	13	—	—	1,840	11,420	6,210	1,490	—	1,490	810	51	91,150	250	1,230	260	195
196	Prairie Elk	McCone	Charles	1965	6,100	32	1 00	5 12	35	7	—	—	320	970	3,030	70	—	70	219	44	4,852	13	60	10	196
197	Prichard Creek	Toole	Sunburst																		5,413	15	112	28	197
198	Pulnam	Richland	Interlake & RR	1969	11,900	41	1 75	16 9	30	12	—	—	4,160	18,590	4,470	2,140	—	2,140	514	32	7,972	22	2,133	7	198
199	Pulnam	Richland	Mission Canyon, Madison	1978	9,500	34	1 42	92 6	35	3	—	—	320	6,270	19,600	160</									

LINE NO.	FIELD	COUNTY	PRODUCING FORMATION	YEAR OF DISCOVERY	DEPTH	GRAVITY ° API	F V F.	NET PAY FT.	PORO-SITY (%)	% WATER	RECOVERY FACTOR %		PRODUCTIVE AREA ACRES			ULTIMATE RECOVERY					1981 PRODUCTION		CUMULATIVE PRODUCTION 1-1-82 (M BBLs)	RESERVES (M BBLs)	LINE NO.
											PRIMARY	SECONDARY		(M BBLs)	BBLs/ACRE	PRIMARY (M BBLs)	SECONDARY (M BBLs)	TOTAL (M BBLs)	BBLs./ ACRE	BBLs./ ACRE FT	BBLs	BOPO			
251.	Spring Lake	Richland	Red River	1963	11,700	51	2.00	9	12	30	56	—	480	1,410	2,930	790	—	790	1,646	183	19,475	53	721	69	251
252	Spring Lake South	Richland	Red River																		17,600	48	—	—	252
253.	Stampede	Richland	Red River																		34,215	94	40	59	253
254	Stensvad	Musselshell	Tyler	1958	5,500	33	1 17	25	14	20	31	14	1,200	22,280	18,570	7,000	3,080	10,080	8,400	336	15,482	42	10,036	44	254
255	Sumatra	Rosebud	Tyler	1949	4,500	32	1 16	30	19	35	32	—	5,520	136,780	24,780	34,000	9,540	43,540	7,888	263	876,884	2,402	38,994	4,546	255
256	Sunny Hill	Sheridan	Madison																		11,196	31	87	—	256
257	Sunny Hill	Sheridan	Red River	1978	12,000	45	1 38	25	17	50	1	—	960	11,470	11,950	170	—	170	177	7	13,611	37	89	81	257
258	Three Buttes	Richland	Gunton, Red River	1978	12,400	43	—	12	—	—	—	—	320	—	—	90	—	90	625	52	36,565	100	66	24	258
259	Tippy Butte	Musselshell	Tyler																		31,806	87	44	17	259
260	Tule Creek	Roosevelt	Nisku	1960	7,500	46	1 41	25	15	30	42	—	1,280	18,490	14,440	7,690	—	7,690	6,008	240	92,920	255	7,471	219	260
261	Tule Creek East	Roosevelt	Nisku	1964	7,500	43	1 91	30	18	30	41	—	320	4,910	15,350	2,030	—	2,030	6,344	211	7,883	22	1,967	63	261
262	Tule Creek South	Roosevelt	Nisku	1964	7,600	43	1 40	8	12	30	39	—	480	1,790	3,720	690	—	690	1,437	180	7,741	21	678	12	262
263	Two Waters	Richland	Red River																		17,190	47	45	—	263
264	Utopia	Liberly	Swilt	1977	2,300	33	1 15	17	16	40	4	—	680	7,490	11,010	310	—	310	456	27	62,141	170	231	79	264
265	Vaux	Richland	Interlake																		78,038	214	131	141	265
266	Vaux	Richland	Mission Canyon	1977	8,800	34	1 20	40	4	43	6	—	1,440	8,500	5,900	500	—	500	347	9	77,966	214	229	271	266
267	Vaux	Richland	Red River, Charles	1976	12,400	48	1 60	24	14	45	6	—	2,240	20,070	8,960	1,290	—	1,290	576	24	142,192	390	740	550	267
268	Volt	Roosevelt	Nisku	1964	7,300	47	1 40	14	20	30	35	—	800	8,690	10,860	3,080	—	3,080	3,850	275	75,938	208	2,422	752	268
269	Weed Creek	Yellowstone	Amsden	1966	6,200	35	1 07	12	8	23	14	—	800	4,290	5,360	590	—	590	738	61	3,992	11	585	5	269
270.	Weldon	McCone	Kibbey	1964	5,900	39	1 01	14	16	35	40	—	1,560	17,450	11,180	7,030	—	7,030	4,506	322	18,640	51	7,007	23	270
271	West Butte	Toole	Sunburst	1968	2,300	40	1 10	10	24	23	13	—	160	2,090	13,030	270	—	270	1,688	169	16,971	46	242	28	271
272	Whitlash	Liberty	Swilt	1927	2,600	38	1 13	15	16	20	24	—	1,950	25,700	13,180	6,240	—	6,240	3,200	213	160,309	439	4,545	1,695	272
273	Whitlash, West	Toole	Sunburst																		3,801	10	71	4	273
274	Willow Creek North	Musselshell	Tyler	1970	4,000	32	1 20	12	13	54	36	7	160	740	4,640	250	50	300	1,875	156	10,112	28	281	—	274
275	Willow Ridge	Toole	Burwash																		4,213	12	23	29	275
276	Willis Creek South	Fallon	Red River	1964	8,700	33	1 20	12	18	35	25	3	480	4,360	9,080	1,090	150	1,240	2,583	215	34,852	95	899	341	276
277	Winnell Junction	Musselshell	Tyler	1973	2,500	28	1 10	12	18	30	14	26	240	2,560	10,660	350	670	1,020	4,250	354	70,416	193	571	449	277
278	Wolf Springs	Yellowstone	Amsden	1955	6,200	30	1 07	11	6	23	61	—	2,080	7,660	3,680	4,650	—	4,650	2,336	212	14,279	39	4,545	—	278
279	Woodrow	Oawson	Siluro-Ord	1952	9,600	42	1 30	25	14	35	15	—	560	7,600	13,580	1,120	—	1,120	2,000	80	14,417	39	1,045	50	279
280	Wrangler	Sheridan	Red River	1979	11,200	30	1 00	6	10	—			640			240	—	240	625	104	50,671	139	132	108	280
281	Wrangler North	Sheridan	Red River	1979	10,000	41	—	31	—	—			320			200		200	625	20	14,814	41	43	46	281
282	Wright Creek	Powder River	Muddy	1969	4,800	35	1 10	5	26	48	14	—	400	1,910	4,770	270	—	270	675	135	7,935	22	222	48	282
283	Yates	Wibaux	Ouperow																		10,651	29	11	—	283
284.	Miscellaneous Other																								284
	Small Fields																				1,310,077			10	
285	TOTAL																				30,813,412			203,058	285

SHOWING PRODUCTIVE FORMATIONS IN MONTANA OIL AND GAS FIELDS *

CHARLES G. MAIO, GEOLOGIST — TOM RICHMOND PETROLEUM ENGINEER

[illegible]

* SOME FIELDS SHOWN ARE DEPLETED OR NO LONGER PRODUCTIVE.



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